

# Public Utilities



Volume 62 No. 11

November, 20 1958

## WANTED . . . PRACTICAL LIAISON BETWEEN UTILITIES AND HIGHWAY AUTHORITIES

*A Symposium*

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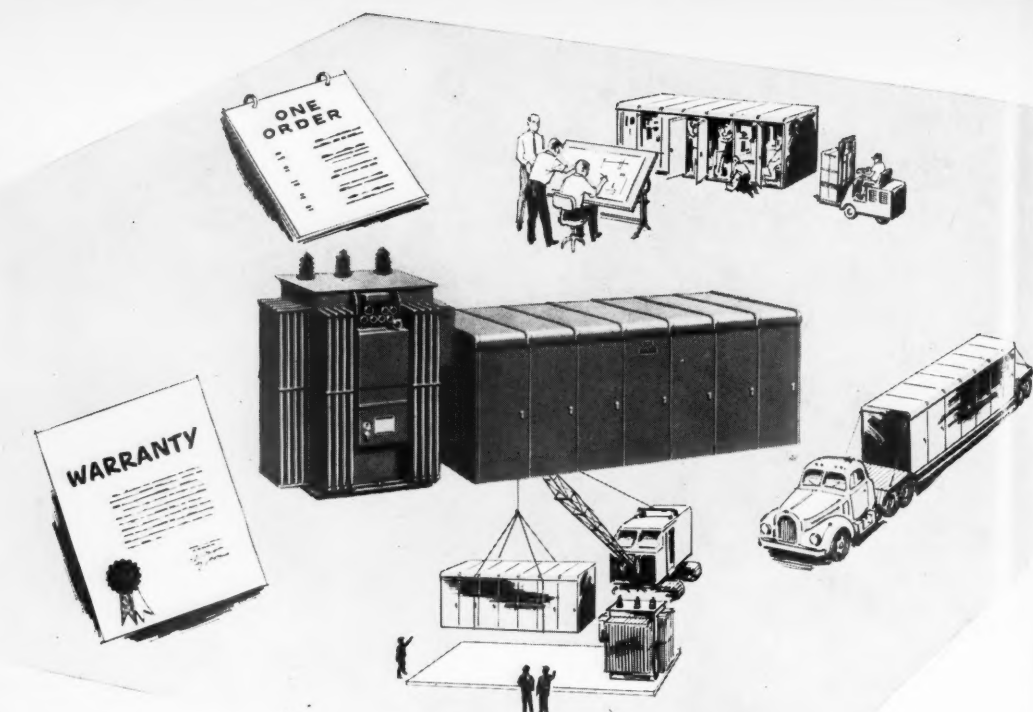
## Advantages of High Debt and Preferred Stock Financing

*By Michael J. Kraemer*

« »

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# Public Utilities

## FORTNIGHTLY

VOLUME 62

NOVEMBER 20, 1958

NUMBER 11



### ARTICLES

#### Wanted . . . Practical Liaison between Utilities and Highway Authorities . . . *A Symposium* 857

This is an exchange of views between spokesmen and representatives of various public utility companies—gas, electric, telephone, and water—and federal and state highway authorities.

#### Advantages of High Debt and Preferred Stock Financing . . . *Michael J. Kraemer* 875

Should the proportion of total capitalization and surplus (net assets) evidenced by long-term debt be increased because of the income tax deductibility of interest payments? And how about preferred tax financing?

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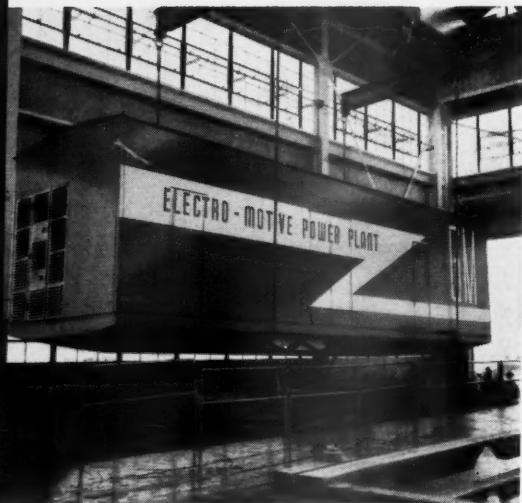
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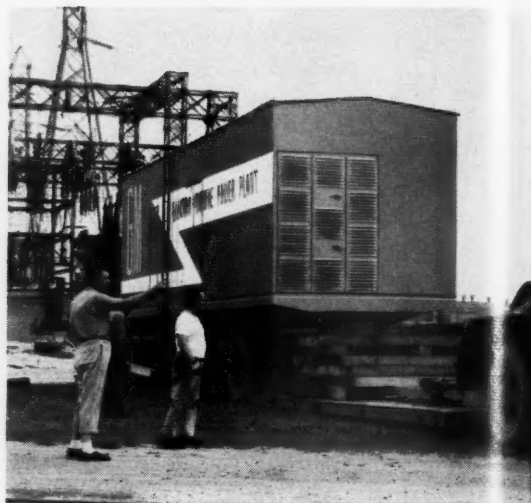
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## FIRST DAY

First of three self-housed generators is placed on flat-bed trailer or rail car at Electro-Motive Plant. Unit is then hauled to installation site.



## THIRD DAY

First generator arrives at site. Previously, underground fuel tanks, lines, cables were installed, ground leveled and stone fill added. Ties were then placed on fill to form foundations for plant components.



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Adjustment and inspection. Performance tests on individual components begin. On ninth day, plant checked out under actual load conditions, integrated into system operations. Safety fence completed.

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# IN THE LINE IN TEN DAYS



## TENTH DAY

000 KW of new peaking and reserve power is put on the line. Landscaping was added later to complete site. Plant operates completely unattended, comes up to full load from dead start in less than ninety seconds. Entire plant could be moved to new site in same ten-day period, if changing load characteristics require such a move. For complete details, contact your Electro-Motive representative.

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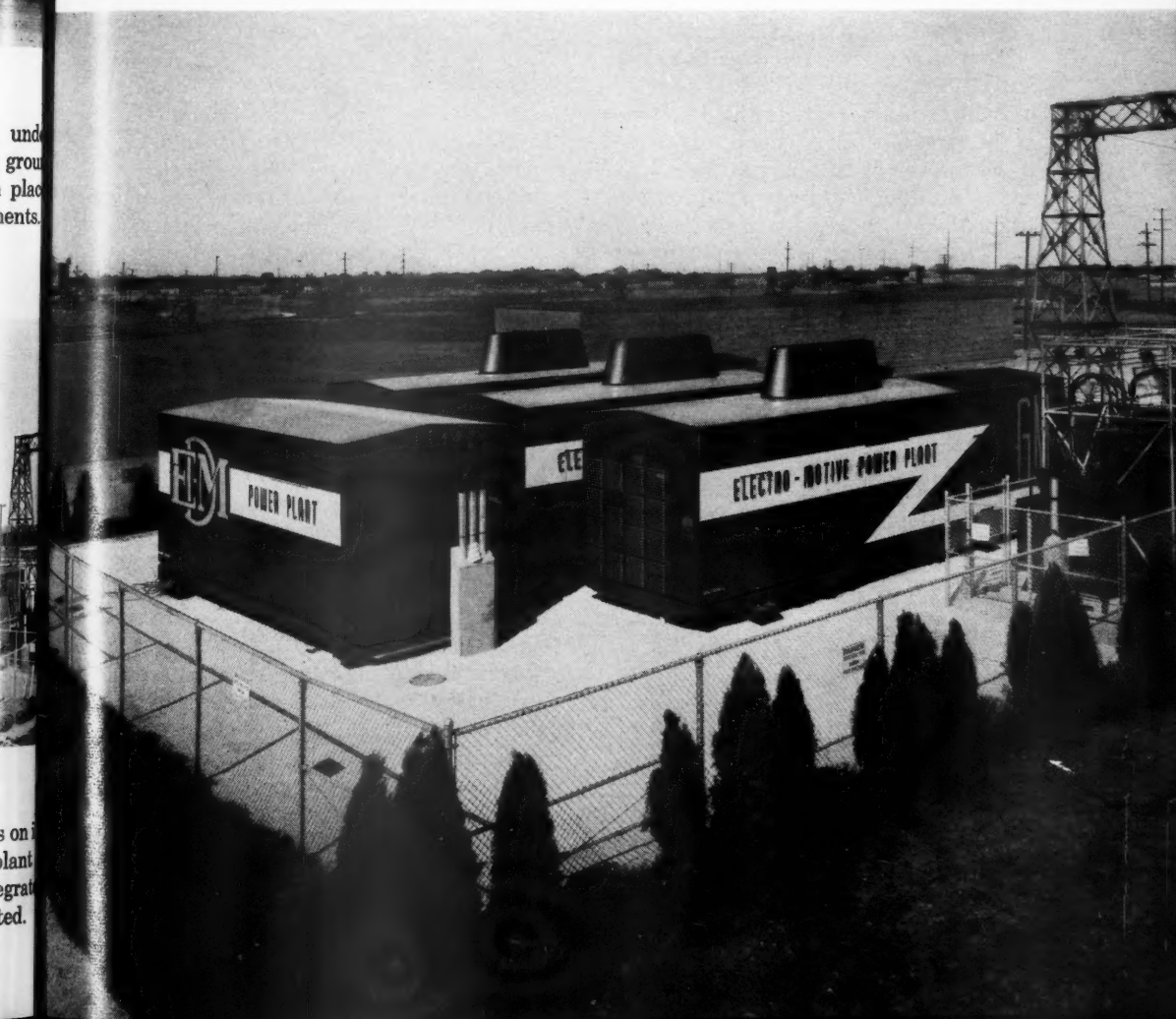
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# Pages with the Editors

LAST July at the Greenbrier Hotel in White Sulphur Springs, West Virginia, there was a panel discussion on the advantages of a liaison among state highway officials, federal highway officials, and public utilities. This was held under the auspices of the Great Lakes regional division of the National Association of Railroad and Utilities Commissioners. This seminar was organized by Vincent P. McDevitt, vice president and general counsel of the Philadelphia Electric Company, and former chairman of the Section of Public Utility Law of the American Bar Association.

THE program was very well received, and since then the wish has been expressed in many quarters that the views of the various panelists might be expressed in writing so as to reach a larger audience. Accordingly, the editors of this publication requested various members of the panel to submit their manuscripts for publication, and these papers are reproduced herewith.

As explained by Mr. McDevitt, who was the co-ordinator for the seminar at the Greenbrier, the original purpose of this panel was to discuss only the equities of reimbursement of public utility com-



Fabian Bachrach

VINCENT P. MCDEVITT

panies for the cost of relocation of their facilities due to highway construction. But last year after President Eisenhower signed the new highway law which includes some provision for reimbursement, the topic was broadened to embrace a number of complexities of road building in which public utilities have an interest.

THE moderator of the panel was E. R. LOCKHART, vice president of Stone & Webster Service Corporation (whose discussion on the problems of the national highway program begins on page 857). Mr. LOCKHART is a graduate of the California Institute of Technology (BS and MS). His duties as consultant for Stone & Webster bring him into contact with gas, electric, and water utilities in states all over the Union.

DON S. HOLDRIDGE, general attorney for the General Telephone Company of the Southwest, reflects the viewpoint not only of the independent companies but the telephone industry as a whole. Mr. HOLDRIDGE is a graduate of the University of Colorado Law School ('41). He was a flying instructor in the U. S. Army Air Corps during World War II, attaining the rank of Captain. Since then he has practiced privately in San Angelo, Texas.



MICHAEL J. KRAEMER

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The offerings are made only by the applicable Prospectus.*

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October 29, 1958

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THE paper by DAVID DUNLAP, beginning on page 866, reflects the viewpoint of gas, electric, and water utilities and the economic, legal, and physical difficulties which grow out of the highway construction program. Mr. DUNLAP has held various positions in the bureau of accounts of the Pennsylvania Public Service and Public Utility commissions since 1940. After World War II he studied law at the University of Pennsylvania and is now counsel for the Pennsylvania Electric Association and secretary for the Pennsylvania Water Works Association. He has been rate counsel for various gas and electric utilities.

EDWARD S. HARRIS, whose article on state highway planning practices begins on page 869, is chairman of the right-of-way division of the Connecticut Highway Department. He finds that state highway planning practices are being adjusted to long-range planning needs. But while there is co-operation and discussion between state highway agencies and local and private planning groups, this author sees the need for an "open-door policy." Under such an arrangement any utility could have reasonable access to authorize contact with the state highway departments to obtain necessary information. Mr. HARRIS' paper at White Sulphur Springs was presented by Commissioner Joseph Sharfsin of the Pennsylvania Public Utility Commission.

GEORGE M. WILLIAMS, whose article on federal highway practice begins on page 871, is assistant commissioner for engineering of the U. S. Bureau of Public Roads of Washington, D. C. He outlines the advantages of good and timely communication between the two government highway agencies (federal and state) and the utility operating agencies. Mr. WILLIAMS' paper was presented at White Sulphur Springs by M. B. Christensen, chief of the construction and maintenance division of the Office of Engineering, Bureau of Public Roads.

Mr. WILLIAMS is a native of Wisconsin and a graduate of the University of Colorado (BS-CE, '27). He has made his entire career with the U. S. Bureau of



GEORGE M. WILLIAMS

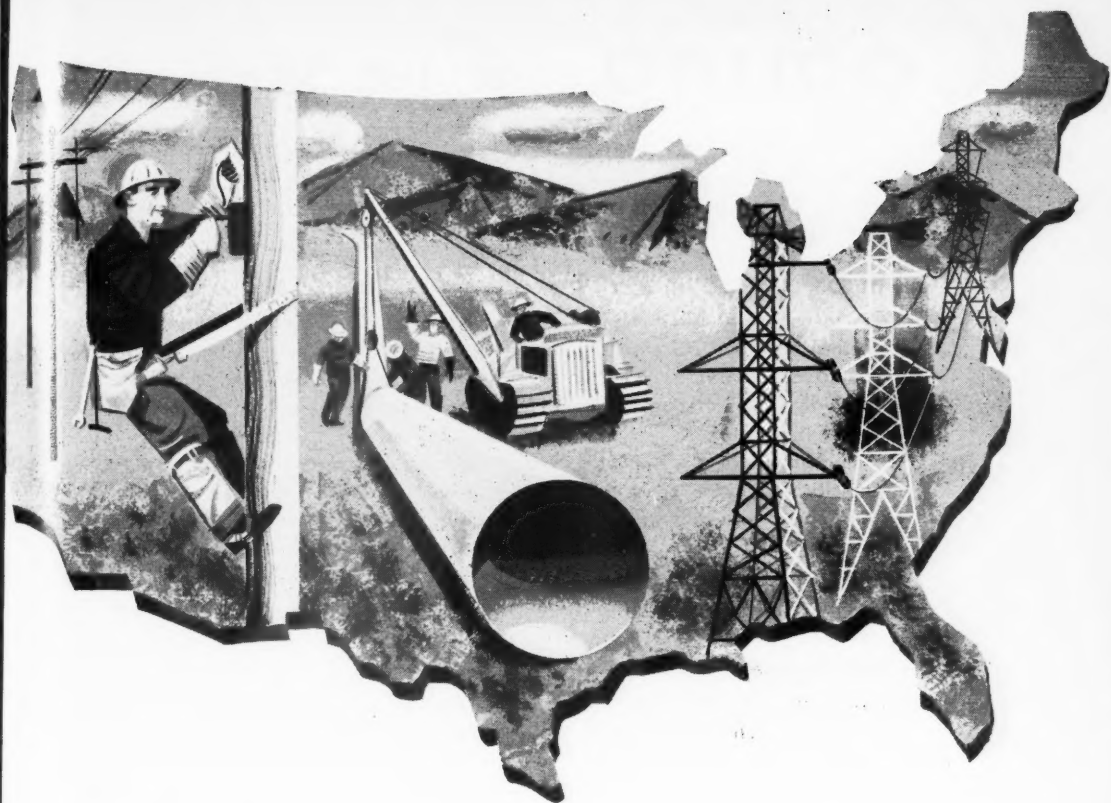
Public Roads. He started at the western headquarters in San Francisco, had much to do with the Alaska Highway, and Philippine rehabilitation. He came to Washington in 1954 as principal assistant deputy commissioner.

\* \* \* \*

ALSO in this issue is an article of special interest to our readers in the financial field as well as those with regulatory or managerial responsibilities. Beginning on page 875 is a discussion of the advantages and disadvantages of high debt ratio and the present use of preferred stock as a financial vehicle. The author is MICHAEL J. KRAEMER, an executive consultant for Commonwealth Services Inc. of New York city. Mr. KRAEMER is a native New Yorker, who started his career as statistician with the Southern Pacific and Missouri Pacific railroads during the twenties. He returned to New York in 1927, where he was a utility analyst with several financial houses: Hayden, Stone & Co., Calvin Bullock, and Lionel D. Edie & Co. He has been with the Commonwealth Services Inc. since 1954, specializing in financial and economic problems of client public utility companies throughout the country. He is author of the monthly Commonwealth publication entitled "Public Utilities—Perspective."

THE next number of this magazine will be out December 4th.

*The Editors*



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# Coming IN THE NEXT ISSUE

(December 4, 1958, issue)



## **CAPITAL NEEDS OF ELECTRIC POWER**

The management of an electric power company is not primarily concerned as to whether over the entire history of the United States the trend of prices has been upward or downward. What is of chief interest to it is whether within the next twenty-five years, the approximate life of equipment purchased, there will be inflation or deflation, or both. To be caught by a falling off in demand with high-priced equipment, yielding economies at near peak production, and having a large reserve capacity, is not the desire of any management. In the United States, inflation has traditionally followed wars. Professor Franklin H. Cook of the College of Business Administration, Pennsylvania State University, has made an analysis of some past capital and debt relationships for steam, hydro, and purchasing-type utilities in an effort to project what may happen under future deflation or continued inflation.

## **THE IMPACT OF INFLATION ON EARNINGS**

Assuming that continued inflation will eventually squeeze stockholder investors in the electric utilities, what can be done by management to maintain a continued appeal to investors in order to raise the vast amount of capital which will be needed by the expanding electric utility companies? Paul C. Mathis, professor of economics, State University of South Dakota, has taken a careful look at the impact of inflation on earnings of this utility industry. He raises the serious question of whether improved technology and increased consumption can offset price rises and stable rates of depreciation as in past years. Will the future investors demand higher dividend pay-out or percentage yield? Is the industry reaching the end of its time-tested, built-in capacity for absorbing increased operating costs by continued improvement of technology and increasing velocity of consumption per consumer?

## **HOW PEOPLE FEEL ABOUT UTILITY COMPANIES**

There has been a considerable amount of discussion among public relations people concerning the "image" of a utility company as perceived by different groups. How does the ratepayer really see his electric company? How does it look through the eyes of the employee? What is its appearance to the investor in different classes of its securities? And how about the general public, other than the customer? It is no secret that the same corporation may present widely different pictures to these various audiences. James H. Collins of Washington, D. C., author of numerous business articles, gives us an account, in a very broad way, of how people actually **feel** about utility companies. It may not be the way most of us think. He discusses the new survey tool, Motivation Research, which can be used to correct such images where they are distorted to the detriment of a company's public relations in various contact areas.



**Also . . . Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.**

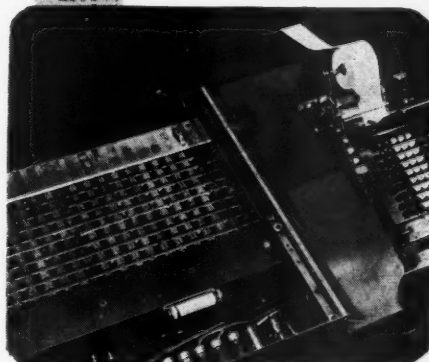
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# Remarkable Remarks

*"There never was in the world two opinions alike."*

—MONTAIGNE

DWIGHT D. EISENHOWER  
*President of the United States.*

"Achievement and progress cannot be created for our people; they can only be created by our people."

JAMES F. OATES, JR.  
*President, Equitable Life Assurance Society of the United States.*

"If tax reduction becomes necessary, emphasis must be given to tax reforms which will stimulate savings and new investment."

NEIL H. JACOBY  
*Dean, Graduate School of Business Administration, University of California at Los Angeles.*

"Broadly speaking, the United States can avoid both inflation and unemployment by operating a free economy in which enterprise is open, competition is vigorous."

ROBERT B. MEYNER  
*Governor of New Jersey.*

"... when the states abrogate or neglect their functions, it is an invitation for the federal government to step in to fill the vacuum. We have seen that happen in many areas of government ..."

CLIFFORD F. HOOD  
*President, United States Steel Corporation.*

"Even the strongest and wealthiest nation in the world cannot long endure a situation where government is subtracting the capital resources of its people and its industries just about as fast as enterprise is adding them."

GLENN T. SEABORG  
*Chancellor, Berkeley Campus, University of California.*

"We must exercise care to have a proper balance between the humanities, the professional areas, the social sciences, and the physical and natural sciences. We must never allow an overemphasis on any of these areas of scholarship."

ROGER M. BLOUGH  
*Chairman of the board, United States Steel Corporation.*

"With steady employment and production, and in no other way, we have the good life for all. They are inseparable—production and employment. Lose one and you lose the other; stifle one and the other expires. There is no one on the earth who doesn't benefit from useful production and employment—and the steadier the better."

EDITORIAL STATEMENT  
*The Wall Street Journal.*

"The politicians are not mistaken in thinking that government fiscal policy, its budget and taxes, is a powerful economic drug. The mistake here is in pretending that it is a medicine of such precise effect, and of such known quality, that it can be used alternately as stimulant and tranquilizer by the brilliant doctors in Washington to keep the patients in any desired state of euphoria. Yet that is the pretense in the tax cut talk that has been going around Washington."



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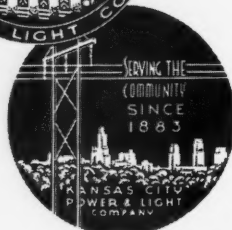
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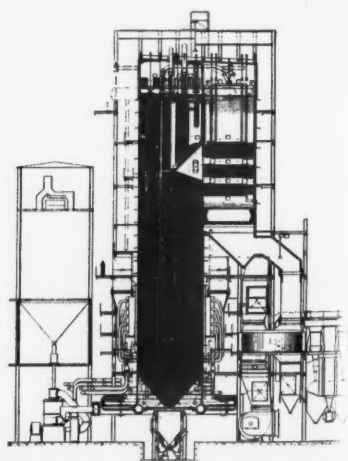
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# New Montrose Station

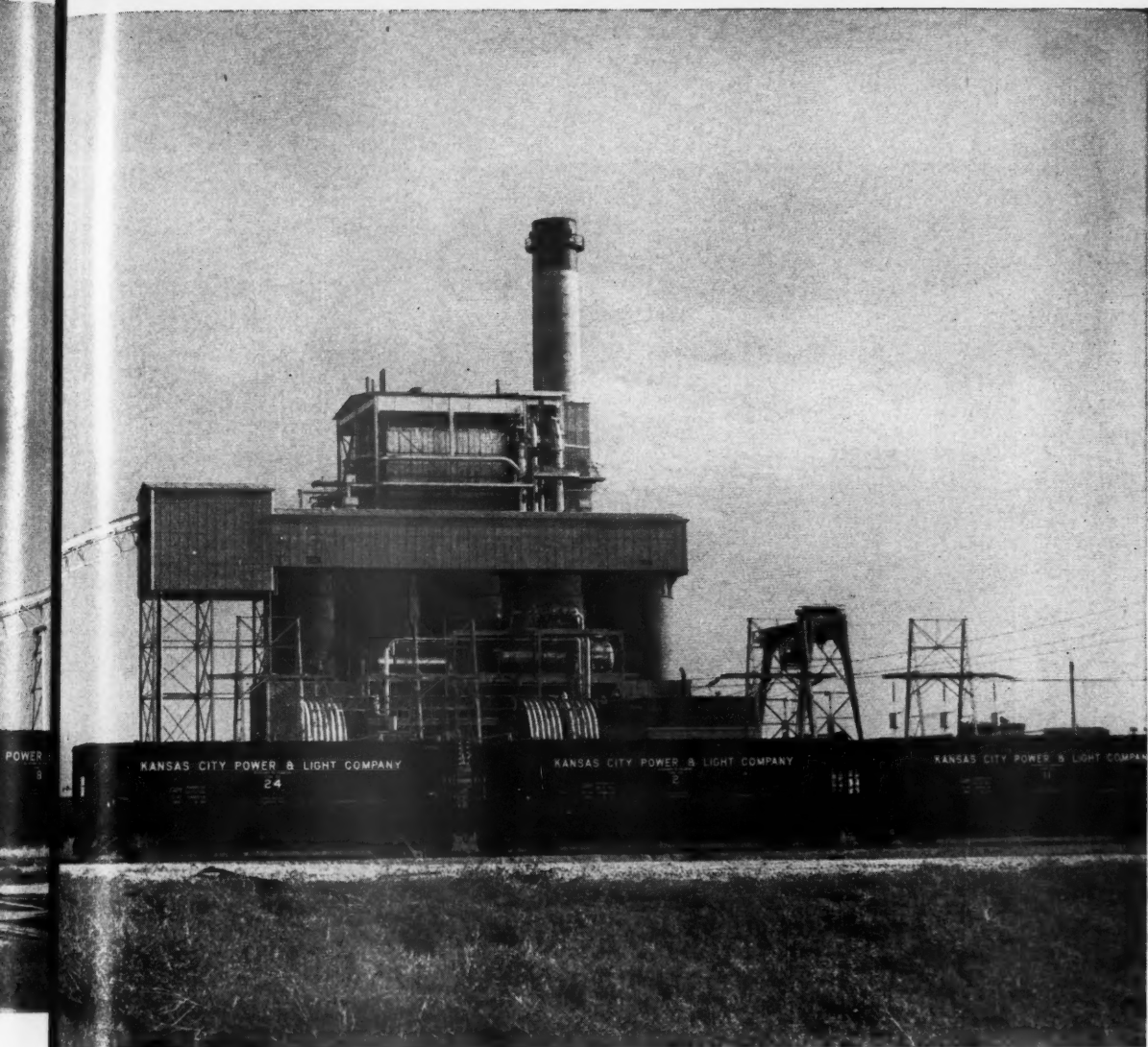
**GOES  
INTO  
SERVICE**

The C-E unit shown at the right is now in service at the new Montrose Station; a duplicate is on order. It is of the controlled circulation, radiant reheat type with a divided furnace arrangement. The reheater surface is located in the first pass, between the finishing superheater and the primary superheater in the rear pass. Economizer surface is below the secondary superheater and regenerative type air heaters follow the economizer. The units are designed to supply steam at a throttle pressure of 1800 psi at 1000F, reheated to 1000F. The fuel is pulverized coal using Bowl Mills and tilting, tangential burners.



**MONTROSE**





Kansas City Power & Light Company—in its 75th anniversary year—has recently put on the line the first of two 175,000 KW units at its new Montrose Station, located 65 miles southeast of Kansas City; the second unit is scheduled for service in mid-1960. The plant was designed, engineered and constructed by Ebasco Services, Inc.

It is located convenient to nearby strip mines which will supply all fuel requirements. A 1500-

acre lake, to provide condensing water, was constructed as part of the project. Power will be transmitted over two 154,000-volt lines to the dynamic Kansas City area.

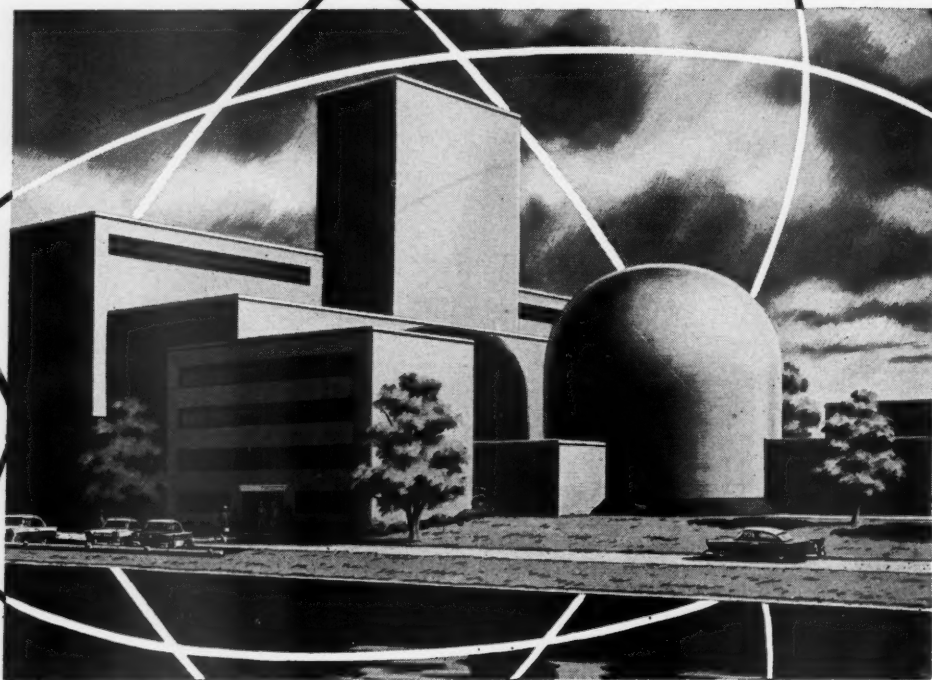
Steam for the new turbo-generator at Montrose Station is provided by a C-E Steam Generating Unit, a cross-sectional elevation and brief description of which appear on the opposite page.

## COMBUSTION ENGINEERING

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Under Construction Near Monroe, Michigan

by

POWER REACTOR DEVELOPMENT COMPANY

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THE DETROIT EDISON COMPANY

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**COMMONWEALTH ASSOCIATES INC.**  
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## COMMONWEALTH ASSOCIATES INC.



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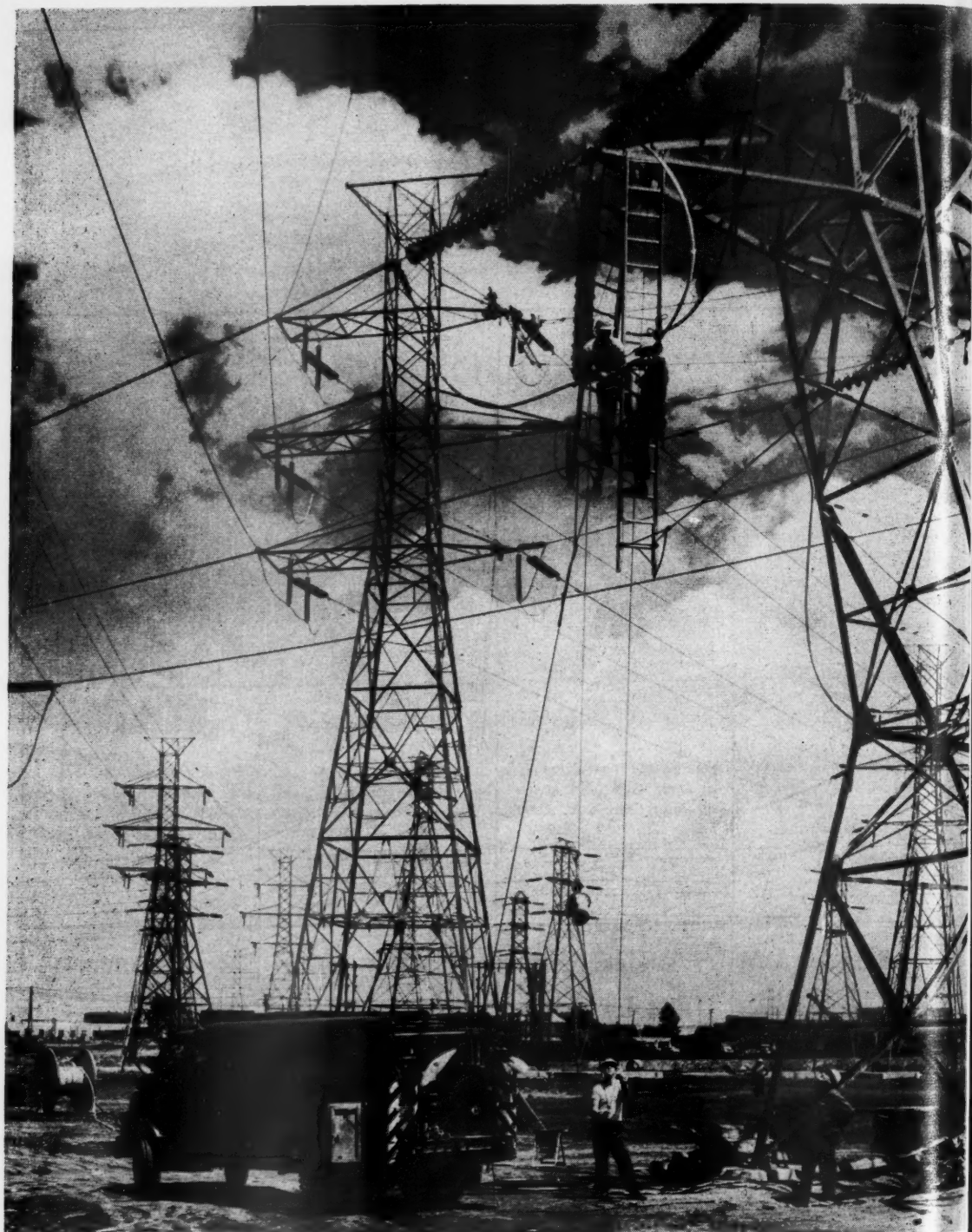
*The Commonwealth Professional Engineering Organization*

# UTILITIES

## *A.l.m.a.n.a.c.k*

### NOVEMBER-DECEMBER

|   |   |  |   |
|---|---|--|---|
| <b>Thursday—20</b><br><br><i>National Association of Railroad and Utilities Commissioners ends four-day annual convention, Phoenix, Ariz.</i>         | <b>Friday—21</b><br><br><i>Television Broadcasters begin annual membership meeting, New York, N. Y.</i>   | <b>Saturday—22</b><br><br><i>Institute of Appliance Manufacturers will hold year-end meeting, Dallas, Tex. Dec. 7-9. Advance notice.</i>   | <b>Sunday—23</b><br><br><i>American Nuclear Society will hold annual meeting, Detroit, Mich. Dec. 8-10. Advance notice.</i>                               |
| <b>Monday—24</b><br><br><i>Rocky Mountain Gas Association will hold annual meeting, Denver, Colo. Dec. 30. Advance notice.</i>                        | <b>Tuesday—25</b><br><br><i>Oklahoma Broadcasters Association will hold winter meeting, Claremore, Okla. Jan. 17, 1959. Advance notice.</i>                 | <b>Wednesday—26</b><br><br><i>Advertising Association of the West will hold mid-winter conference, San Jose, Cal. Jan. 23-25, 1959. Advance notice.</i><br><br> | <b>Thursday—27</b><br><br><i>Public Utilities Advertising Association, Region 9, will hold meeting, Portland, Ore. Jan. 29, 30, 1959. Advance notice.</i> |
| <b>Friday—28</b><br><br><i>Southwestern Legal Foundation will hold short course on oil and gas law, Dallas, Tex. Feb. 2-27, 1959. Advance notice.</i> | <b>Saturday—29</b><br><br><i>National Telephone Co-operative Association will hold annual meeting, Washington, D. C. Feb. 6, 7, 1959. Advance notice.</i>   | <b>Sunday—30</b><br><br><i>American Society of Mechanical Engineers begins annual meeting, New York, N. Y.</i>   | <b>DECEMBER</b><br><br><b>Monday—1</b><br><br><i>American Society of Refrigerating Engineers begins semiannual meeting, New Orleans, La.</i>              |
| <b>Tuesday—2</b><br><br><i>Minnesota Telephone Association will hold annual convention, Minneapolis, Minn. Feb. 15-18, 1959. Advance notice.</i>      | <b>Wednesday—3</b><br><br><i>Public Utilities Advertising Association, Region 1, will hold meeting, New Haven, Conn. Feb. 26, 27, 1959. Advance notice.</i> | <b>Thursday—4</b><br><br><i>National Warm Air Heating and Air Conditioning Association ends four-day annual convention, Cleveland, Ohio.</i><br><br>            | <b>Friday—5</b><br><br><i>Florida Telephone Association ends two-day annual convention, St. Petersburg, Fla.</i>  |



### Crossroads of Power Pathways

*These linemen of the Niagara Mohawk Power Corporation rival the man on the flying trapeze as they work on transmission lines in the switchyard of the Huntley steam station where two new 200-kilowatt generating units will up the station's capacity to 1.2 million kilowatts.*

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# Public Utilities

*FORTNIGHTLY*

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## WANTED . . .

### *Practical Liaison between Utilities and Highway Authorities*

#### A SYMPOSIUM

An exchange of views between spokesmen and representatives of federal and state highway authorities, gas, electric, telephone, and water utility companies on the advantages of a practical liaison among highway authorities, utilities, and others affected.

#### Advantages of Practical Liaison

By E. R. LOCKHART\*

*Vice President,*

Stone & Webster Service Corporation

**T**HE real magnitude of some of the problems which necessarily accompany a program as huge as that con-

\*For additional personal note, see "Pages with the Editors," which also contains a reference to the statements by the co-ordinator of the original presentation of this symposium, Vincent P. McDevitt, vice president and general counsel, Philadelphia Electric Company, Philadelphia, Pennsylvania.

templated by the National System of Interstate and Defense Highways is just beginning to be appreciated although the program is now about two years old. Some of the implications and concurrent questions that it raised only became manifest to a number of people when they



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came face to face with the realities of the problems involved. One of these that I suspect initially received rather scant, or, at best, theoretical, attention was the utility relocation problem. Certainly the general problem was recognized by those who initiated the program but it is doubtful whether very many people, including the utilities themselves, fully appreciated the complications that might be involved particularly near the approaches to larger cities and metropolitan areas. The fact that there are almost 700,000 miles of underground gas pipelines in this country, an even larger mileage of water, sewer, fuel, and other conduits, substantially over a million miles of electric, telegraph, and telephone lines, and almost 400,000 miles of railroad track should be of interest.

**H**OWEVER, the fact that a large percentage of these miles were either located in or headed toward the same areas of population concentration as were the highways puts a somewhat different light on the statistics and perhaps begins to point up some aspects of the real problem.

It seems obvious that since all of the agencies involved in providing these services have the same aim—namely, that of providing necessary service to the public—their efforts should be aimed toward a co-operative solution that will result in the most expeditious and least costly construction for the total public good. To me, the need for liaison is so evident that there is no necessity to belabor the premise that a practical liaison between highways and utilities, and other preferred agencies, is desirable.

The various panel members will develop thoughts on methods and I believe

that their presentation may be enhanced if we review for a moment some of the difficulties that have arisen in the first years of the program. I have listed a number of items; some of them may be interdependent and you may undoubtedly think of a number more. All of these reasons are directed to the general problem, recognizing that in some notable instances planning and co-ordination have existed in certain areas between highway departments and neighboring utilities for a number of years.

### Problem's Importance Overlooked

**T**HE first and most widespread reason for some of the confusion which has appeared in the initial stages of the program, I believe has been the failure to recognize the magnitude of the problem. The whole federal highway program was discussed for a number of years but actually its final development and enactment happened rather rapidly. It caught a number of highway department and utilities woefully unprepared. I can speak from experience for some of the electric utilities.

Traditionally, their construction budgets have included a more or less general item each year which was, on the whole, considerably less than one per cent of their annual construction expenditures. This item was variously labeled, "expenditures in connection with road widening," or "relocation costs in connection with highway construction." The amounts were generally based on rather vague past experience and I must admit there was very little effort made to ascertain in advance the real extent of this work. I suspect that most utility people considered it more of an annoyance than a problem and their

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dealings were generally with road contractors on a catch-as-catch-can basis. I know of very few utilities that had a close working relationship with their state highway department and, on the other hand, I know very few state highway departments which considered utility relocation very much of a problem.

### Lack of Man Power

THE second item that comes to mind is the fact that, in general, the highway departments and some utilities were understaffed as far as professional help was concerned. I believe it is a fair statement that highway engineering wage scales were somewhat below levels of general industry and the highway program was instituted in a period when there was intense competition in all industry for engineers. Most of the highway professional group consisted of civil or architectural engineers and I should say it would have been very unusual to find in any highway department professional talent with extensive knowledge of utility applications.

The question of the availability of engineering help has been corrected to some extent by raising wage scales, by more effective use of professional personnel, and, temporarily, by the decreased demand for engineers. There is still room in most instances, I believe, for establishing engineering knowledge of utility problems.

### Other Difficulties

CERTAINLY another difficulty presents itself in the length of time that is required to establish a final route plan. In this connection, the highway departments have my wholehearted and heartfelt sympathy. They are confronted with

the problem of satisfying more diverse interests in arriving at a solution to this problem than any group I know. The resolution of all of the viewpoints represented by chambers of commerce, public groups, individual citizens, political pressures, and social and economic rehabilitation is certainly an astounding task and I can appreciate some reluctance to add the requirements of utility groups to the list. However, in view of the magnitude of the possible savings both in cost and in expediting engineering and construction, the addition of this group appears almost mandatory.

In some areas I am informed there is a fear of a possibility of windfalls if the location of a route is divulged prior to its final approval. Experience in some states, with the attendant publicity, has undoubtedly made some of the highway commissioners even more cautious in this respect. However, all utilities are used to dealing in confidential terms with various industries and such confidence cannot be impaired if the expectation of such continued relationships is to be maintained. Furthermore, in most states a sound appraisal policy should obviate this problem. I believe one of the most important elements to be gained by establishing close liaison is the development of mutual respect for the integrity and fair-mindedness of the highway departments and the utilities.

ONE of the most difficult hurdles to overcome is the lack of a responsible medium for establishing the methods of co-operation. It is such meetings as these under the sponsorship of such an organization that can provide the incentive and suggest methods for co-opera-

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tion. I believe one of the most fruitful results of this conference may be the suggestions looking toward the solution of this aspect of the problem. There probably is no single general rule which will fit all situations but I am hopeful that this meeting will create the desire and that a number of the suggestions which may be put forth will serve as a basis for establishing the means.

Perhaps some of the reluctance to establish co-ordinated planning has arisen from the lack of appreciation on the part of both the highway departments and utilities, of the magnitude of the benefits, saving in time and dollars to be gained by a closely co-ordinated planned program. In some instances of which I am aware, the ease of solution that resulted from the first attempts at co-operative planning and the resultant savings in time and man power were pleasantly surprising. It may be difficult in some cases to arrive at a close estimate of the dollar saving but quite frequently the saving in engineering man power is readily apparent.

### Closer Co-ordination Needed

**N**ONE of the items which I have listed present any unsurmountable difficulties. However, there is no way to achieve a co-ordinated program by indulging in wishful thinking or merely giving lip service to the idea. Nor do I believe the final answer is merely an expedient sort of co-ordination to solve a few pressing immediate problems and then be relegated to the limbo of discarded ideas. The utilities are used to dealing in long-term projects, certainly in construction programs covering a period of at least five years in the future and in many cases tentative programs which may extend over even a

much longer period. Some of the highway departments have also been in a position to anticipate new highway needs and, therefore, have a common ground for a discussion of probable future requirements. It is this part of a program which appears to me as one that would provide the most effective good for a long period of time. Immediate problems will be solved even without close liaison at considerably greater expense than need be but it appears to me to be most important that all of these agencies be prepared to sit down and discuss intelligently some of the problems which will be facing us all in the future.

There is every indication that the gas pipelines will continue to expand and gas, water, and other underground distribution systems will be extended into new areas and increased in size, and there is little doubt that the electric utilities will be faced in the future with intensified problems of transporting large blocks of electric energy from more remote sources into densely populated areas. All of these services, including public transportation, communication, water, fuel, and electricity are essential elements of our modern civilization, and all are being required in greater quantities as time progresses and our economy becomes more complex. There is only a certain amount of space available either under the ground or on the ground and it seems to me that not only common sense but necessity will dictate the most effective use of the available room.

**T**HERE is no need for detailed and final plans for projects which may be required ten or fifteen years in the future; however, it has been found that such plan-

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ning, which may initially be only tentative, provides a much sounder base for immediate construction than to have a system of any kind "just grow" like Topsy. Generally, these longer-range plans are purely tentative and are adjusted at frequent intervals to meet immediate needs and unexpected developments. There are no laws that I know of that would be broken by the establishment of such a program and no changes required except a concerted exercise of reasonableness and good will. In this connection, time is the important ingredient; each month or day that goes by without a constructive approach to the establish-

ment of liaison represents not only some additional cost that could be avoided but also makes the problem for the future that much more difficult.

I am extremely hopeful that as a result of this meeting some definite and concrete program for the initiation of a practical liaison among the highways, utilities, and other affected agencies will be established and that the results will represent the culmination of the efforts of men of good will in their desire to accomplish a job which represents the best overall judgment with regard to the public and thereby promote the regard of all our citizens.



## The Independent Telephone Company Viewpoint

By DON S. HOLDRIDGE\*

**I**N his presentation, Mr. Lockhart has briefly outlined the needs for a practical liaison among the highways, the utilities, and the other agencies which will be affected by the prospective development of the program for the National System of Interstate and Defense Highways.

As the regulators of rates and services for many of the 27,000 utilities in the country furnishing gas, petroleum products, electricity, telephone, telegraph, or transit services, you have a real and continuing interest in the realization of any plan or program which will result in savings to the ratepaying public. As individual citizens you share the general public's desire for the early completion of the proposed highway system with the least possible inconvenience and at the lowest

possible cost. A practical liaison program would result in cost reductions for taxpayers or ratepayers, or both, and would minimize delays and inconvenience.

**A**LTHOUGH enactment of the Federal Aid Highway Act of 1956 added to the urgency of finding a solution to the problem of highway-utility co-operation, it is not a new problem. For the past decade, highway departments throughout the nation have been hard pressed to meet the public demand for new and improved highways and roads. This has been happening during a period when utilities of all kinds have been called upon to make tremendous new capital commitments to meet the demand for new or increased services. And all of this unprecedented demand is occurring simultaneously with inflation, which appears still to be with us

\*General attorney, General Telephone Company of the Southwest, San Angelo, Texas. For additional personal note, see "Pages with the Editors."

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despite the performance during the past several months of certain industries.

At all times, but particularly at such times, those who are charged with the responsibility for investment in capital items must seek to meet the requirements of the public at the lowest possible cost consistent with the satisfactory rendition of the required services. Unnecessary or duplicating costs must be avoided.

As a member of the independent telephone industry I am speaking, although without benefit of authority, on behalf of 4,000 telephone companies. They serve over 10,000 communities and own a substantial portion of the 611,450 miles of telephone pole line in the nation. Many of them are small, and not all of them are affluent enough to meet those demands which are being made upon them.

You will pardon me, I hope, for disregarding problems of utilities other than telephone, except as they may be the same as ours. Other members of this panel are well-qualified to view the subject from the frame of reference of those other utilities.

Historically, telephone company pole lines have followed road and highway rights of way. This has been in the tradition of the "post road"—that highways are for the expeditious transmission of intelligence as well as passengers and merchandise. Except for highly developed and heavily used toll lines, telephone companies have, at least until recently, made a minimum use of private right of way in the construction of outside plant.

### Typical Company Situation

THE company which I represent is an illustration of a situation which is

probably common enough to be called "typical." The company has operations in five southwestern states, and the largest portion of that operation is in the state of Texas.

Ours is one of some 230 companies which provide telephone service in that state. We have experienced difficulty in getting any advance information as to highway department plans which might affect our outside plant facilities.

NOT long ago it became necessary for the company to rebuild 14 miles of toll line between two of its exchanges. To hold down maintenance costs, it was desirable that the route of the line parallel a U. S. primary federal-aid highway. That highway is not a portion of the interstate and defense network, but it is a heavily traveled, single-lane highway. It was determined that the line should be rebuilt upon private right of way adjacent to the existing highway right of way. Private right of way was obtained, at a cost of about \$150 per mile. The company now has to earn a return upon that investment which would not have been necessary if, for instance, highway development were to occur on the other side of the road. As a single instance, an investment of an unnecessary \$2,000 is not spectacular, but such investments are continuously being made all over the country by telephone companies seeking to protect the integrity of their investments.

A proper co-ordination between the company and the highway department might have been able to accomplish the rebuild upon highway right of way in such a manner that subsequent highway improvement would not have involved utility relocation expense.



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### Future Highway Programs

THE highway program for the future, as exemplified by the requirement of some 41,000 miles in connection with the interstate and defense system, will place an enormous burden upon utilities by requiring removal, relocation, and reconstruction of facilities in new locations. As pointed out recently by Sam Houston, chairman of Region 4 of the American Right of Way Association, at the fourth annual national seminar of that association in San Francisco,

It is all the more burdensome when you consider (1) it means in most instances the building of duplicate facilities—as the service customer or consumer by right expect to have continuous utility service; (2) it assumes the immediate ability to engineer the new project; (3) it assumes immediate availability of custom or standard materials irrespective of time delays for possible manufacture or delivery; (4) it assumes no difficulty in negotiating and securing the necessary and new rights of way; (5) it assumes the availability of necessary construction forces; and, above all else (6), it assumes the immediate ability to raise the necessary capital without the usual frustrations, for no one voluntarily steps up to advance these unexpected funds for these consequences.

We can readily see how a practical liaison among the highway departments, the utilities, and other affected agencies could reduce those six extra burdens upon the utilities mentioned by Mr. Houston through the medium of co-ordination in the early stages of either highway or

utility construction or improvement.

VERY little benefit can come from our admission of the need for such a liaison, however, unless we attempt to determine how our efforts to establish it should be directed, and unless we anticipate and attempt to avoid some of the obstacles to success.

The popular modern approach to this kind of problem seems to be the enactment of a new statute—or the creation of a new agency. Far too often the resulting legislation removes a symptom, while permitting the disease to flourish. I do not believe that the cure of the disease “lack-a-liaison” lies in a legislative prescription. It appears to me that the materials and supplies necessary to a cure are already on hand in most states, waiting to be put to use.

### Right-of-way Rules

I HAVE here the forms for application for use of highway right of way as the location for utility pole lines for the states of Texas and Louisiana. Utility facilities cannot be placed upon highway rights of way in those states until favorable action has been taken upon such application. Such requirements are similar to those prescribed by most states. One of the requirements of both of the applications is that they be accompanied by detail drawings or blue prints of the proposed installations. With such information in his hands, an engineer in the highway department could easily determine, by reference to the department's own plans, whether or not there will be future involvement and possible conflict. Changes made at the “drawing-board” phase of construction

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are cheap in comparison with the thousands of dollars which would result from the necessity of relocation of major facilities—such as underground toll cables.

All too frequently, however, only a perfunctory check is made to determine whether or not proposed pole locations interfere with or endanger the use of the right of way for *existing* highway use. That type of processing does not take into consideration contemplated right-of-way alterations or long-range highway planning. Such matters should be given consideration then, lest they result in a higher bill later either to the taxpayer or the ratepayer.

**I** BELIEVE that "drawing-board" co-ordination is the objective of our liaison. That means some method of establishing two-way communication must be worked out.

A few telephone companies have engineering staffs qualified to work directly with the highway departments—most, however, do not, and manage to get along without engineering or with only that provided by the manufacturing companies which supply them. An engineer or an engineering staff to handle such matters should be made available to them. One way this could be done is by adding personnel with the proper training and education to the staff of the voluntary, industry-wide associations which exist in most states.

Ordinarily, the offices of such associations are located in the state capitol, which is also the usual site of the principal office of the state highway department. At present they only function as an information center, an official or unofficial lobby-

ing agency, and as an agency for the co-ordination of industry efforts to improve service, operations, or public relations.

The dues for members are ordinarily based upon a sliding scale related to the number of customers, gross revenue, or some other suitable measuring device.

### Big Companies Need Liaison

**S**INCE the larger companies with higher number of customers and greater gross revenues would also be the ones with the most facilities, I believe we can safely assume they would also be the ones which would have the most frequent need for the liaison we are talking about. If that method of financing the provision of such a liaison engineer proved, in practice, to be inequitable, the association could charge only for actual work performed in accordance with a set schedule of fees. The expense should be borne by the utilities using the service in some kind of relationship to the amount of their use of it.

The engineering personnel which such a program would require would be persons with a high level of educational and vocational qualification within the industry concerned. More than just a cursory understanding of the engineering problems associated with highway construction and maintenance would also be a necessity. Any time of such engineering staff not required for such liaison activities could be used by the smaller companies to their advantage.

Probably there are other devices available to utility companies to establish their end of the circuit of communication. This

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one, or some variation of it, would work, however.

**I**N the telephone business, we become highly incensed if one of our customers leaves his instrument "off-the-hook" to avoid being disturbed. Not only does such a customer tie up part of the equipment and make it unavailable to others, he also destroys our boast that we provide two-way verbal communication. We have discovered that, to be salable, communication must have the two-way feature. Thus far, I have only outlined a procedure by which I think communication from the utility to the highway department could be achieved.

What about the line of communication from the highway department to the utility in connection with the department's short- and long-range plans which will have an effect on existing or proposed utility plant?

It almost goes without saying that engineers must be available for liaison duties or the communication can never be more than one-way. Presupposing the availability of such engineers in the department, however, they will have to have, readily available to them, basic information as to the extent and locality of utility facilities before they can initiate effective communication.

Such a source is readily available in the files and records of the public utility commissions of many states. The growing complexity of service and regulatory matters within the jurisdiction of those commissions has caused them (as it recently did in the state of Arkansas when it adopted new rules and regulations in 1956) to call upon the utilities within

their jurisdictions to keep on file with the commissions suitable maps, plans, and records showing the entire layout of production, delivery, and distribution facilities. Such records would be an invaluable tool in the hands of the highway department engineers in the early stage of planning. In the later stages, the engineering staff of the utility or the industry provided liaison agent could work closely with the highway engineer, based upon sound, economical preliminary planning.

### Liaison Discussion First Step

**I** do not think that the liaison we are discussing today will make any mystical appearance because we talk about it here or at other formal meetings of this type. But I do believe that the mere fact that the problem has come up for discussion at a meeting such as this is one of the most promising signs indicating that a solution will be found. We should not wait for public indignation over wasteful expenditure to be our spur.

You gentlemen, because of your interest in good public utility services at prices which are fair and reasonable to the public and to the utilities are, it seems to me, in a very good position to urge and foster the creation of a practical liaison.

In short, I believe

- (1) that the need for such a liaison is clear;
- (2) that the ingredients necessary to a liaison are already in existence;
- (3) that a tool for such a liaison exists in the voluntary, industry associations;
- (4) that the records of many utility commissions are immediately

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adaptable to use in preliminary planning of a co-operative nature; and

(5) that you can be a help in getting a practical liaison established where it does not already exist.



### The Position of Gas, Electric, and Water Utilities

By DAVID DUNLAP\*

**F**ORTY years ago, my city was connected to its nearest neighboring town by an unpaved road six miles long. The edges of the city and the town were sharply defined, and along the entire six miles of road there was nothing but woods and farm land.

Thirty-five years ago, the road was paved; and at about the same time the city electric company extended its lines to the town. Within a few years, there was a dwelling or a small business on every plot along that road, and the gas and water companies had extended their lines to serve the occupants.

Twenty years ago, the six-mile area had become so built up that a second road was constructed to bypass it. History repeated itself. Dwellings and other buildings appeared along the bypass; and again the utilities extended their lines to provide service.

Five years ago, still a third road was built, to bypass the bypass. This third road is a limited access highway, but that fact has not discouraged people from building their homes on the adjacent land, nor has it prevented the repetition of demand for electric and gas and water service.

Sometimes the utility service comes

first, and the highway afterward. Twenty-five years ago, one of our Pennsylvania electric companies installed a grid work of distribution lines to serve the farmers in a predominantly rural county. Homes and small industries sprang up here and there along the grid work, and created the need for the paved roads which now traverse the county.

**T**HE change in the geographical distribution of our people, and the rapid increase in their numbers, not only create a common problem for the highway departments and the utilities, but they also limit the ways in which the problem can be solved.

Because of population growth, all land is becoming scarce. Because of population redistribution, land suitable for highways and utility lines is becoming even scarcer. In many areas today, and in many more areas in the future, the pressure of population growth and shift tends to preclude separate strips of land for the highway and the utility.

The highway and the utility—the means of motor transportation, of communication, and of the distribution of energy and heat and water—have been bedfellows in the past, but on a more or less voluntary basis. Today the bedfellowship is, or is fast becoming, compulsory.

Every new house you see in your travels

\*Counsel, Pennsylvania Electric Association, Pennsylvania Gas Association, and Pennsylvania Water Works Association, Harrisburg, Pennsylvania.

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is creating the demand for highways and utility lines, and at the same time is reducing the supply of land on which they may be built.

### Concepts Hindering Liaison

As occupants of the same land strips, it might be well for us to clear certain ideas out of our mental attics. Some utilities think of the highway departments, not as providers of the means for the movement of people and goods, but as takers of private rights of way, and imposers of burdensome restrictions. Some highway departments think of the utilities, not as providers of essential services, but as private enterprises engaged in seeking a profit. The trouble with such thinking is that it places the emphasis upon those matters which enlarge, rather than minimize, the difficulties of living in close quarters.

It is this kind of thinking which has caused us to postpone consideration of liaison until this late date. If we are to be successful, not only in establishing suitable methods of liaison but also in making them work, the first and most essential ingredient is for us to stop regarding each other as nuisances, and to recognize that transportation, communication, and the distribution of electric energy and other utility services are vital and interdependent elements in the well-being of the people. In a word, we need understanding.

THE interests of highway departments and public service companies touch at three different levels, and call for three different kinds of understanding and co-operation.

The top level involves the making of policy for application on highways generally. One such policy, now in the making, has to do with limiting or excluding utility facilities on limited access highways. But other questions of the same level come to mind. What clearances shall be required between roadbed and overhead wires? Shall bad intersections and other trouble spots be lighted; and, if so, who shall provide and maintain the lighting facilities? What width of right of way should be acquired for new highways? What regulations should be established for trenching and laying of water and gas pipes, to assure safety while the work is in progress and proper restoration of the surface afterward?

The co-operation required at this level is for the utilities to be informed of the matter being considered by the highway department, and for the department to be informed of the effect of various choices upon utility service. For example, if road clearances are under consideration, and the height is fixed at the bare minimum, the prospect would be that thousands of wires constructed pursuant to that minimum would have to be replaced later. On the other hand, if the clearance is set unnecessarily high, the poles supporting those wires will also have to be unnecessarily high. In either event, an unnecessary burden would be placed upon the utility, and ultimately upon the utility service user.

At the policy-making level, the power of final decision rests in the highway department. The decision, however, should be made with full knowledge of its significance to the public utility user as



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well as the public highway traveler.

The best representative of the utility users' interest at this level is the utility association. Most types of utilities have such associations, and the association personnel either have or can get the information with which to advise the highway department.

The second level of co-operation has to do with the selection of routes for particular highways and utility lines. A utility would not knowingly erect a line on private land which is to be taken shortly thereafter for highway purposes; but it may erect the line in ignorance of the highway department's plans, with consequent increased burden of land damage costs to the department. A utility would not knowingly erect a line on a highway which is to be relocated shortly thereafter; but again it may erect the line in ignorance of the department's plans, with consequent increased burden on the utility and its consumers.

**W**HAT is needed here is a constant interchange of information between the engineer who plans highway routes and the engineer who plans routes for his company's utility lines. As Mr. Lockhart has pointed out, the disclosure of a highway route, before the land rights for it are secured, may provide windfalls for private interests and increase the cost of securing those rights. This difficulty, however, is not confined to highway departments.

Public utilities, too, have found that the cost of land rights increases at a remarkable rate, if the owner knows they are needed for an electric or gas transmission line.

Consequently, our utilities, like our highway departments, entrust the planning of new routes to men who are qualified not only as technicians, but as prudent and honest people who will neither disclose their knowledge nor use it to their own advantage.

At this same second level of co-operation the highway engineer and utility engineer can work together on the planning of construction details. What facilities are now in the route which the new highway will follow? What precautions must be taken by the bulldozer operator to avoid breaks in existing water and gas lines? By crane and shovel operators to avoid contacts with existing wires? Will utility facilities be needed for traffic signals, roadside rests, fire protection, and the like?

If utility facilities are to be placed in the highway, how should their installation be scheduled?

**H**IGHWAY policy making and planning are usually carried on at department headquarters in the state capitol, often quite remote from the site of highway construction work.

The third level of co-operation is needed when planning has matured into actual construction; and it is, needed at the construction site. Even the most careful planning cannot deal with the heavy thunderstorm, the underground rock, and the hundred other obstacles that will almost certainly be encountered when the job is actually under way.

Consequently, the planning co-operation at the second level should be followed through with working co-operation at the third level, between the construction

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supervisors for the highway department and the public utility. At the upper levels, liaison is rendered meaningless and mutual confidence is destroyed, unless co-operation takes tangible form at the construction site.

The points and methods of liaison which I have sketched are merely suggestive, and subject to modification to fit particular circumstances. Any method will work if mutual understanding exists; none will work without it.



### The Standpoint of State Highway Departments

By EDWARD S. HARRIS\*

STATE highway planning practices are facing up to the need to plan for long-range needs. There is co-operation and discussion with all local municipal and private planning and development groups. They hold many hearings and discussions preliminary to adopting a route location—but in large part ignore the utilities. That is, unless the only practical route location happens—as it often does—to be on the alignment of an existing 30,000-kilovolt line. Or as more than likely happens, the utility people have an ear to the ground and through personal acquaintance with someone in the SHD are able to dig out some information on a projected route. And it is often only through the good offices of many of these personal acquaintances of highway and utility people that either one's plans are disclosed or made available by one or the other.

In Connecticut we are now employing consultants to survey and design many of our major improvements. We direct that all arrangements regarding utility changes and relocations be conducted by a representative of the consulting firm. And that is just a wonderful situation! At the

present time we are employing some thirty such firms—with thirty representatives making thirty different representations and interpretations to the affected utility people.

As against that, I prefer the personal poker-playing or lodge or church-door acquaintance and liaison, but in many areas the liaison falls between those two extremes.

There is agreement, on the one hand, that there is a major lack of what we might call continual or continuing flow of information relative to planning or programming from the highway departments to the utilities, and likewise a major lack of interest, intent, or desire to improve the situation, or in fact do too much of anything about it.

The basic difficulty and attitudes are as varied as the many jurisdictions involved; the inability on the part of informed persons to secure official acceptance of the need for liaison (much as there was only a few years ago a reluctance to accept the right-of-way agent as anything more than a hired hand); there is indifference; and lastly I believe there is outright prejudice. And there is lack of understanding.

\*Chairman, right-of-way division, Connecticut Highway Department, Hartford, Connecticut.

## PUBLIC UTILITIES FORTNIGHTLY

### Statewide Clearinghouse

**J**UST recently in Connecticut the utilities themselves have voluntarily designated one statewide concern as a clearinghouse for reception and redistribution of all matters of common interest, an idea that I was fortunate enough to be very close to, due to that "poker-playing" acquaintance I referred to.

This need arose as a result of a series of highway abandonments by our department and subsequent abandonments by the towns—both without notice or "by your leave" to the utility companies which found their gas, water, phone, and electric facilities, which had been installed in a public highway under a franchise right, now located on a piece of private property. I assure you that as a result of that clearinghouse idea, we just are not doing that any more.

I cited that merely to indicate how a little recognition of rights, and some honest co-operation, could have avoided a disagreeable situation and a lot of harsh words. Franchise rights I referred to a few minutes ago are not flaunted today as they were in the past. Those words, franchise rights, to some people in other jurisdictions and in mine, still have the flavor of dark and sinister political maneuvering for power and profit grabbing.

Though your people have done a magnificent job with the public on your public relations and community and civic associations, and by your general interest and frankness in public affairs, I cannot find, however, that highway departments generally have been influenced.

This matter of public utility relocation is an entirely new matter to me—it previously having been handled by the con-

struction department—has only recently been, shall I say, dumped on the right-of-way bureau. We had to create utility "know-how" from raw material and recruits—develop new contacts—and discover how backward a forward-looking state we are, in this business of highway-utility relationship. There was co-operation, but any resemblance to actual direct practical liaison was accidental.

### Two Sides to Picture

**T**HIS is indicative, to me, of total ignorance of the basic, or of the elemental concept of the evolution, if you will, of transportation and communication, and the rights and interests of the public as a user of the utility service. They have always run together; the only difference is, now, the one is on wheels as against the hoof, and the other on wire or in conduit, as against the written word or message. They used the highway—both of them jointly, though not always connubially—for convenience and general public interest and benefit. Transportation—for pleasure, business, and gain; and communication—for pleasure, business, and gain—all within the highway, either on foot, on horseback, or on wheels. But when you put the thing on a track, or in a pipe, or sent it over a wire, you had to get the right to use the highway. The user of the commodity or service that was transported on foot, horseback, or wheels for pleasure and gain, can and does get the same benefits and pleasure and gain, though it is now delivered by wire or by pipeline.

I believe many of us in the highway field have forgotten that, or overlooked our utter dependence on the utility serv-

## PRACTICAL LIAISON BETWEEN UTILITIES & HIGHWAY AUTHORITIES

ing us, and have been too intent on designing a highway to get as many cars as possible past a given point as fast as possible, to take time out to look at the picture from your standpoint.

**T**HIS is again a good place to point up the need for a strong stand by the American Right of Way Association in or through the ASSHO in this matter of establishing a regularly constituted procedure for practical liaison between the interested agencies.



## The Viewpoint of the U. S. Bureau of Public Roads

By GEORGE M. WILLIAMS\*

**T**HE word "liaison" has several meanings dependent upon its use. One meaning is an improper relationship between a man and a woman. A second meaning is a linking of operations, as between two distant forces, by means of officers in communication with both forces. We are concerned with the second meaning, and a means of effecting good and timely communication between the two forces of the highway construction and the utility operating agencies, and to diminish any separation between them that may exist.

There has generally been some utility work associated with the great bulk of the federal-aid highway projects that have been and are being undertaken by the several state highway departments. The Bureau of Public Roads, which is the federal agency responsible for administer-

This received considerable attention at the San Francisco ROW seminar, where resolutions were passed aimed at a solution through committee action. This to me is too high level, and may be too late, and can very well become just a doctrine. What is needed, in my opinion, is an "open-door policy," if you want to call it that, where any utility can have reasonable access to an authorized and informed representative, or unit, in a highway department where information can be secured and exchanged.

ing the provisions of the Federal-Aid Road Act of 1916 and subsequent amendments, has always had an interest in utility work associated with federal-aid highway projects. This interest is because such work affects the obtainment and clearance of the highway rights of way, the timing at which construction could proceed, the time for completion and opening to service of the highway facility, the bid prices for items of the highway project, and the time and the costs for engineering supervision. And in addition there are the factors of public relations, public good will, and costs to the overall public because of adjustments to facilities made necessary by the highway improvement.

**P**RIOR to 1944 the bureau's interest was indirect, but nevertheless was active. With passage of the Federal-Aid Highway Act of 1944 and subsequent acts

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## PUBLIC UTILITIES FORTNIGHTLY

through that of 1958, the bureau now has a very direct interest. This is because of the provisions for increased authorizations of federal-aid highway funds, the permissible use of such funds for preliminary engineering and for right-of-way acquisition as well as for physical construction, the permissible use of such funds for projects within urban areas, the adoption of control of access for all sections of the presently authorized 41,000 miles of the National System of Interstate and Defense Highways, and express authority to reimburse states for a share of the costs of utility adjustments under certain conditions.

### States Working with Utilities

**A**LL state highway departments are now including utility adjustment work in interstate system projects wherever such work is reimbursable under federal-aid regulations, and many are doing likewise for projects on the other federal-aid systems; that is, the primary and secondary systems and their extensions into and through urban areas.

As of recent records, the mileage of all federal-aid highways totaled 776,072, comprised of 38,548 miles of routes of the 41,000 miles of interstate highways, 209,146 miles of other federal-aid primary routes, and 528,378 miles of federal-aid secondary routes. In calendar year 1957, 7,386 federal-aid projects of different categories were advanced to actual construction at a total estimated cost of approximately \$2.4 billion. Not all of these projects involved utility adjustments, but the number of projects and their dollar value reveal the size of the federal-aid highway program and clearly

indicate that a tremendous job of correlation of highway and other interests is accomplished annually. The total annual federal-aid highway construction program will be even greater in the coming years as a result of the sums authorized by the Federal-Aid Highway Act of 1958.

Accordingly, it is both necessary and desirable that the plans of any utility for expansion or change that will affect highway interests, and that the plans of any highway agency that will affect any utility, be made known to the other affected interest as soon as possible in order that there may be time for co-ordination of work, establishment of work schedules, and savings in cost to the public.

### Surveys Often Made

**O**N several occasions, the Bureau of Public Roads has conducted surveys of the situation in each state with respect to delays to highway construction caused by failure to effect adjustments in utilities in time. The chief reasons for failure to effect adjustments in utilities in proper time and sequence were reported to be lack of advance planning and investigation, and lack of liaison between highway agencies and utility companies. Insufficient attention has been given in the preliminary engineering stages to determining what utility adjustments will be required and to notifying the utility companies and developing their co-operation to accomplish the adjustments at a time and in a manner which would minimize interference with the highway construction operations.

**E**XPERIENCE in states where such difficulties have been largely overcome



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clearly indicates that determination of the problems involved and initiation of action towards their solution must begin months, or even years, before a project is advanced to the construction stage. One of the most important and effective steps consistently taken in those states that have successfully solved the problem of utility adjustments is to arrange for conferences with representatives of the utility companies as soon as the location and the plans for a highway project have been developed sufficiently to indicate approximately what utility adjustments will be required.

**A**s a result of such conferences, the utility companies are able to make detailed studies of the extent, nature, and cost of the work to be done, to budget and allot funds for the work, to acquire any additional rights of way required, to obtain the necessary materials, and to schedule the operations of its crews to perform the work at the time it should be done to fit highway construction plans. A series of conferences may be desirable in some cases, but, in any event, adequate liaison should be maintained throughout the planning and preliminary engineering stages to keep both the state and the utility companies fully informed of subsequent developments and of progress. It has been found highly advantageous in some state highway organizations to designate a staff engineer in the central office and in the suboffices whose sole or primary function is to handle liaison and co-ordination with the utility companies from the initial planning stage on through the final settlement stage.

The bureau has consistently urged the

state highway departments to adopt and practice the procedure of advance scheduling of highway projects, the establishment of close liaison between the several interests involved, the selection of highway locations that will best serve the highway needs without unduly affecting other interests or needs, and to design to accommodate the foreseeable long-range highway needs.

### Friendly Liaison Is Best

**L**IAISON can be either friendly and co-operative or it can be forced. It should be friendly and co-operative, and if of that nature, will produce the best results.

The state highway departments have the opportunity now to do long-range planning and to develop advance construction schedules for projects on the interstate system. The estimates of cost as prepared by the states in 1957 for completion of that system were based on analyzed locations. The states can rely on presently authorized funds to the extent that reasonably firm construction programs can be established. They have been informed of the practical value and benefit to be derived if such schedules are established. When developed, or during the time of development, such information should be discussed with the affected interests.

Similar actions should be taken on other federal-aid highway developments of a major nature in urban areas, such as expressways or principal arterials, that will require an extended period of time to construct and will affect a large number of utility installations or planned extensions thereof.

## PUBLIC UTILITIES FORTNIGHTLY

### State-Utility Agreement

THE bureau's Policy and Procedure Memorandum No. 30-4 deals principally with the matters of reimbursement. However, it does contain the same requirements for utility adjustment work as are basic to all other work to be undertaken as a federal-aid highway project. That is, the state must program the work of utility adjustments if federal-aid reimbursement is to be requested; there must be an agreement between the state and the utility setting out their separate responsibilities together with an estimate of cost, specifications, and plan of the work agreed upon; and such program and agreement must be approved by the bureau's division engineer before he may issue an authorization that the construction may proceed.

That may be considered a forceful application of the need for liaison, but its purpose is not that. Its purpose is to provide the bureau, the state, and the utility at the earliest possible date with a clear understanding of the scope of the undertaking and the rights and the responsibilities of each party.

To accomplish the objective of translating public funds into usable highway facilities at an economical cost requires serious consideration and positive, concerted action in anticipating, evaluating, and overcoming those factors that would otherwise cause delays and generate unnecessary additional costs. Sustained friendly and constructive liaison between the highway agencies and the utilities will result in benefits to their employers and customers—the general public.

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### Capitalism and the Common Man

*"CAPITALISM has improved the standard of living of the wage earners to an unprecedented extent. The average American family enjoys today amenities of which, only a hundred years ago, not even the richest nabobs dreamed. All this well-being is conditioned by the increase in savings and capital accumulated; without these funds that enable business to make practical use of scientific and technological progress the American worker would not produce more and better things per hour of work than the Asiatic coolies, would not earn more, and would, like them, wretchedly live on the verge of starvation. All measures which—like our income and corporation tax system—aim at preventing further capital accumulation or even at capital decumulation are therefore virtually antilabor and antisocial. . . . The improvement of well-being brought about by Capitalism made it possible for the common man to save and thus to become a Capitalist himself in a modest way. A considerable part of the capital working in American business is the counterpart of the savings of the masses. Millions of wage earners own saving deposits, bonds, and insurance policies. All these claims are payable in dollars and their worth depends on the soundness of the nation's money. To preserve the dollar's purchasing power is also from this point of view of vital interest to the masses. In order to attain this end, it is not enough to print upon the banknotes the noble maxim, IN GOD WE TRUST. One must adopt an appropriate policy."*

—LUDWIG VON MISES,  
*Economist.*

# Advantages of High Debt And Preferred Stock Financing

By MICHAEL J. KRAEMER\*

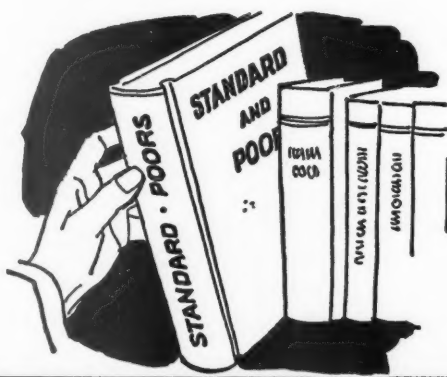
Large amounts of capital will be required to finance the great expansion of utilities which is doubling every eight to ten years. Should the proportion of total capitalization and surplus (net assets) evidenced by long-term debt be increased because of the income tax deductibility of interest payments? There is also the question of preferred stock as a financing vehicle. The preferred stock ratio has been dwindling since the end of World War II. Does preferred stock still have advantages and substantial future possibilities?

**I**N contemporary times it has not been unusual for public utility companies to double in size every eight to ten years. Many projections envisage a continuation of growth at such rates. Vast sums of capital are, of course, required to finance this expansion. The method to be pursued in raising these funds is of prime importance to management and investors alike.

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This report will consider the question: Should the proportion of total capitalization and surplus (net assets) evidenced by long-term debt be increased because of the income tax deductibility of interest payments?

The comments contained herein apply to an established company with a reasonably good capital attracting power as distinguished from a new enterprise with no history of earnings or a company in straightened financial circumstances.



## PUBLIC UTILITIES FORTNIGHTLY

### *Preliminary Comment Cost-of-money Theory*

IT is unfortunate that the cost-of-money theory weighs so heavily on the scales of most rate-making agencies. For this reason it must be given major consideration in this discussion. The theory is wrong because it mixes market and book values. A brief but fairly comprehensive discussion will illustrate the point.

Assume that a company is capitalized with \$50 million of first mortgage  $3\frac{3}{4}$  per cent bonds, \$15 million of  $4\frac{1}{2}$  per cent preferred stock, and \$35 million of common stock and surplus (one million shares), is earning a 6 per cent rate of return on the total investment, and that the common stock normally sells in the open market at 13.9 times share earnings (\$3.41) and 1.35 times book value (\$35) which would produce a market price of  $47\frac{3}{8}$ . If we allow 10 per cent for underwriting fees, expenses, and "rights" value in computing the cost of the common stock segment of the capital, the composite cost of capital is approximately 5.4 per cent based on the approach taken by the proponents of the cost-of-money theory.

| <i>Per Cent<br/>Of Capital</i> |   | <i>Cost<br/>Rate</i> | <i>Weighted<br/>Cost</i> | <i>Composite<br/>Cost</i> |
|--------------------------------|---|----------------------|--------------------------|---------------------------|
| 50%                            | × | 3.75%                | =                        | 1.88%                     |
| 15                             | × | 4.75                 | =                        | 0.71                      |
| 35                             | × | 8.00                 | =                        | 2.80                      |
|                                |   |                      |                          | 5.39%                     |

IF, on the basis of the cost-of-money approach, the rate of return on the \$100 million investment were reduced from 6 per cent to 5.39 per cent, earnings applicable to interest and dividends would decline from \$6 million to \$5,390,000; earnings applicable to the common stock would decline from \$3.41 per share to \$2.80 per share.

An 18 per cent reduction in share

earnings is not calculated to preserve the open market level of the common stock which, at 13.9 times the new earnings of \$2.80 would sell at 39, off  $8\frac{3}{8}$  points. The new earnings-price ratio would remain unchanged at 7.2 per cent and there would be no change in the size of the book common equity (35 per cent) but the common stockholder would have taken an 18 per cent licking in earnings and market value and probably ultimately in dividends as well.

Clearly, coupling an earnings-price ratio with a book capitalization ratio is not a capital-attracting approach or a sound method of assuring solvency and a continuation of good public service. It must be recognized that the typical public utility common stock traditionally sells above book value because of the leverage factor and investors expect this to continue or they may elect to employ their capital elsewhere. If a utility company's common stock normally and justifiably sells on an earnings-price basis of 7.2 per cent and at 1.35 times book value, the two figures should be multiplied in calculating the earnings rate required for the common stock component of the capital structure or the earnings-price ratio should be coupled with 135 per cent of the common equity capitalization ratio (per books) then a composite cost rate of 6 per cent would result.

| <i>Per Cent<br/>Of Capital</i> |   | <i>Cost<br/>Rate</i> | <i>Weighted<br/>Cost</i> | <i>Composite<br/>Cost</i> |
|--------------------------------|---|----------------------|--------------------------|---------------------------|
| 50%                            | × | 3.75%                | =                        | 1.88%                     |
| 15                             | × | 4.75                 | =                        | 0.71                      |
| 35                             | × | 9.75*                | =                        | 3.41                      |
|                                |   |                      |                          | 6.00%                     |

\*Earnings rate on this portion of capital needed to produce a normal relationship of earnings to market price and market price to book value ( $7.2\% \times 1.35 = 9.75\%$  or  $35\% \times 1.35 = 47.4\% \times 7.2\% = \$3.41$ ).

## ADVANTAGES OF HIGH DEBT AND PREFERRED STOCK FINANCING

The cost-of-money theory all too frequently is an attack on the market price of a common stock and the judgment of the market place. A fair rate of return is the product of many considerations.

### Basic Assumptions—Financing

FOR the purposes of the following portion of this analysis we shall assume two companies each with a present capital structure aggregating \$100 million made up of \$50 million of first 3½s, \$15 million of 4½ per cent preferred, and one million shares of common stock. It will also be assumed that both companies are earning at a rate of 10.47 per cent on their capital before deducting federal income taxes and 6 per cent after all taxes. In these circumstances the companies would be earning \$3.41 per common share.

Looking eight or ten years ahead it will be assumed that both companies will double the size of their capital structures and both companies (for statistical simplification) will distribute 100 per cent of their earnings applicable to the com-

mon stock. To finance this expansion—

Company A proposes to adhere to its present capitalization ratios and sell \$50 million of additional 3½ per cent mortgage bonds, \$15 million of 4½ per cent preferred, and \$35 million of additional common (769,000 additional shares at an average net price of 45½).

Company B decides to finance its expansion by an increase in its debt ratio from 50 per cent to 60 per cent; preferred and common stock as a percentage of total capital will each be cut back by five percentage points. Company sells \$50 million of 4 per cent mortgage bonds, \$20 million of debenture 4½s, \$5 million of 5 per cent preferred, and \$25 million of additional common stock (526,000 shares at an average net price of 47½).

### Effect of Rise in Debt Ratios

#### On Capital Structures

THE resulting capital structures are self-explanatory and are summarized in the table below.

In this tabulation it has been as-

|                  | Present         |             | Future                       |             | Future                       |             |
|------------------|-----------------|-------------|------------------------------|-------------|------------------------------|-------------|
|                  | Amt.<br>(Mill.) | Per<br>Cent | Company A<br>Amt.<br>(Mill.) | Per<br>Cent | Company B<br>Amt.<br>(Mill.) | Per<br>Cent |
| First 3½s .....  | \$ 50.0         | 50%         | \$100.0                      | 50%         | \$ 50.0                      | 25%         |
| First 4s .....   | —               | —           | —                            | —           | 50.0                         | 25          |
| Mtge. Debt ..... | \$ 50.0         | 50%         | \$100.0                      | 50%         | \$100.0                      | 50%         |
| 4½% Debs. ....   | —               | —           | —                            | —           | 20.0                         | 10          |
| Total Debt ..... | \$ 50.0         | 50%         | \$100.0                      | 50%         | \$120.0                      | 60%         |
| 4½% Pfd. ....    | \$ 15.0         | 15%         | \$ 30.0                      | 15%         | \$ 15.0                      | 7.5%        |
| 5% Pfd. ....     | —               | —           | —                            | —           | 5.0                          | 2.5         |
| Total Pfd. ....  | \$ 15.0         | 15%         | \$ 30.0                      | 15%         | \$ 20.0                      | 10%         |
| Debt & Pfd. .... | \$ 65.0         | 65%         | \$130.0                      | 65%         | \$140.0                      | 70%         |
| Common Equity .  | 35.0            | 35          | 70.0                         | 35          | 60.0                         | 30          |
| Total .....      | \$100.0         | 100%        | \$200.0                      | 100%        | \$200.0                      | 100%        |
| Com. Shs. (000)  | 1,000           |             | 1,769                        |             | 1,526                        |             |



# PUBLIC UTILITIES FORTNIGHTLY

sumed that Company B will have to pay 25 basis points more than Company A for its new mortgage bond and preferred stock money because of the former company's trend to a higher debt ratio.

## On the Cost of Money

**I**F the common stocks of both companies prior to the expansion period sell in the open market at 13.9 times earnings (an earnings-price ratio of 7.2 per cent) and 10 per cent is allowed for "rights" value, etc., proponents of the cost-of-money theory would compute the cost rate on the common stock equity at 8 per cent and the composite cost of capital at 5.39 per cent.

If Company A expands along conventional lines and its common stock continues to sell at 13.9 times earnings, there would be no change in the composite cost of its capital at the close of the expansion period.

If Company B veers toward the higher debt ratio and its common stock sells at, say, 13 times earnings at the close of the period, the ratio of its mean average share earnings to its mean average market price would be 7.5 per cent for the expansion period. With a 10 per cent allowance for

"rights" value and expenses, the cost rate of common capital would be 8.3 per cent and the composite cost of capital would decline slightly to 5.33 per cent.

**I**T would thus appear that one of the great dangers in going to a high debt ratio is the fact that cost of money as computed by proponents of the theory might decline. This in itself could result in pressure for lower rates and a lower rate of return. The danger is compounded because, as will be shown later, the income tax deductibility of interest payments reduces federal income taxes with concurrent rises in net operating income and the rate of return on investment. On the other hand, advocates of a high debt ratio may argue that the cost rate on the common capital would advance more sharply—for example, if the cost rate were 8.5 per cent for 30 per cent of the capital (2.55 per cent weighted cost) the composite cost of capital of Company B would be 5.39 per cent or the same as for Company A; if the common cost rate of Company B were 9 per cent the composite cost of capital becomes 5.54 per cent. However, a management that deliberately sets out to increase its composite cost of capital

| Present<br>(Col. 1) |                      | Company A<br>(Col. 2) | Future<br>Company B |       |
|---------------------|----------------------|-----------------------|---------------------|-------|
|                     |                      |                       |                     |       |
| 50% × 3.75% = 1.88% | Same<br>as<br>Col. 1 | 5.39%                 | 25% × 3.75% = 0.94% |       |
| 15 × 4.75 = 0.71    |                      |                       | 25 × 4.00 = 1.00    |       |
|                     |                      |                       | 10 × 4.25 = 0.42    |       |
| Subtotal 2.59%      |                      |                       | 7.5 × 4.75 = 0.36   |       |
| 35 × 8.00 = 2.80    |                      |                       | 2.5 × 5.00 = 0.12   |       |
| 5.39%               |                      |                       | Subtotal 2.84%      |       |
|                     |                      |                       | 30 × 8.3* = 2.49    |       |
|                     |                      |                       |                     | 5.33% |

\*An average earnings-price ratio of 7.5 per cent with a 10 per cent allowance for expenses, etc.

## ADVANTAGES OF HIGH DEBT AND PREFERRED STOCK FINANCING



| Income Account (000)                                   | Present  | Future    |           |
|--|----------|-----------|-----------|
|  |          | Company A | Company B |
| Operating Revenues                                     | \$30,000 | \$60,000  | \$60,000  |
| Optg. Exp., Depr. & Taxes (Other than Fed. Inc. Taxes) | 19,531   | 39,062    | 39,062    |
| Optg. Inc. before Fed. Inc. Taxes                      | 10,469   | 20,938    | 20,938    |
| Fed. Inc. Taxes (52%)                                  | 4,469    | 8,938     | 8,431     |
| Total Optg. Rev. Deductions                            | 24,000   | 48,000    | 47,493    |
| Net Operating Income                                   | 6,000    | 12,000    | 12,507    |
| Mtge. Bond Interest                                    | 1,875    | 3,750     | 3,875     |
| Debt Interest  | —        | —         | 850       |
| Net Income   | 4,125    | 8,250     | 7,782     |
| Pfd. Dividends   | 713      | 1,425     | 963       |
| Balance for Common                                     | 3,412    | 6,825     | 6,819     |
| Earned Per Com. Sh.                                    | \$3.41   | \$3.86    | \$4.47    |
| No. of Common Shares                                   | 1,000    | 1,769     | 1,526     |
| Times Earned:  |          |           |           |
| Mtge. Interest (before FIT)                            | 5.58     | 5.58      | 5.40      |
| Mtge. & Deb. Int. (before FIT)                         | 5.58     | 5.58      | 4.43      |
| Total Interest & Pfd. Divds.                           | 2.32     | 2.32      | 2.20      |
| Margin of Safety: (*)                                  |          |           |           |
| For Mtge. Interest                                     | 28.6%    | 28.6%     | 28.4%     |
| Mtge. & Deb. Interest                                  | 28.6     | 28.6      | 27.0      |
| Other Ratios   |          |           |           |
| Operating Ratio  |          |           |           |
| Before Fed. Inc. Taxes                                 | 65.10%   | 65.10%    | 65.10%    |
| After Fed. Inc. Taxes                                  | 80.00    | 80.00     | 79.15     |
| Net Optg. Inc.—% of Cap. & Surp. (Period End)          |          |           |           |
| Before Fed. Inc. Taxes                                 | 10.47%   | 10.47%    | 10.47%    |
| After Fed. Inc. Taxes                                  | 6.00     | 6.00      | 6.25      |
| Per Cent of Optg. Revs.                                |          |           |           |
| Earnings after Mtge. Int.                              | 13.75%   | 13.75%    | 14.39%    |
| Earnings after Mtge. & Deb. Int.                       | 13.75    | 13.75     | 12.97     |
| Earnings after All Int. & Pfd. Divds.                  | 11.37    | 11.37     | 11.37     |
| Per Cent Earned on Book Value of Common Stock          | 9.75     | 9.75      | 11.37     |

\*Earnings after interest but before deducting federal income taxes expressed as a percentage of operating revenues.

would likely be subject to censure in many quarters.

### On Asset Coverages

At the close of the expansion period both companies will have net assets

(capital and surplus) of \$200 million. The company veering toward the higher debt ratio through the medium of debentures would not disturb the asset cover of the mortgage bonds considered separately; however, net assets per \$100 of total

## PUBLIC UTILITIES FORTNIGHTLY

long-term debt and per \$100 of total debt and preferred would decline appreciably.

| Net Assets      | Future  |           |           |
|-----------------|---------|-----------|-----------|
|                 | Present | Company A | Company B |
| Per \$100 of    |         |           |           |
| Mtge. Bonds ..  | \$200   | \$200     | \$200     |
| Per \$100 of    |         |           |           |
| L. T. Debt .... | 200     | 200       | 167       |
| Per \$100 of    |         |           |           |
| Debt & Pfd. ... | 154     | 154       | 143       |
| Per Common      |         |           |           |
| Share .....     | 35      | 39.57     | 39.32     |

### *On Earnings*

**I**N the following resulting hypothetical income statements it has been assumed in all instances that operating revenues, ordinary operating expenses, and earnings before federal income taxes, will bear a constant relationship to the total capital investment.

During the course of doubling capitalization, both companies will increase their common share earnings; however, Company B will show a relatively large gain in share earnings because of the deductibility of interest payments in computing federal income payments. (See table, page 879.)

The high lights of the foregoing tables may be summarized as follows:

- (a) At the start of the expansion period both companies were earning \$3.41 per common share. At the close of the expansion period Company A was earning \$3.86 per common share stemming from a 6 per cent return on capital; Company B on the other hand closes out the expansion period with earnings of \$4.47 a share growing out of a 6.25 per cent rate of return. More than half of the 61-cent spread in share earnings of the two companies at the close of the period is traceable to the higher rate of return of Company B. If the latter were limited to a 6 per

cent return its earnings would have been lower by \$507,000 or 33 cents per share.

(b) Trending to a high debt ratio reduces the earnings coverages of the holders of the fixed interest-bearing securities and the preferred stockholders.

(c) At the close of the expansion period Company A continues to earn at the rate of 9.75 per cent on the book value of common stock whereas Company B earns at the rate of 11.37 per cent. If the rate of return on the total investment of Company B were limited to 6 per cent it would earn at the rate of 10.52 per cent on the smaller book value of its common stock.

### *On Market Prices*

**P**UTTING technical considerations aside, the market price of a debt security or preferred stock is controlled by two factors: the quality or rating of the security and money rates. If a company's credit rating suffers by reason of increasing the portions of capitalization represented by long-term debt and debt and preferred stock the open market prices of its outstanding senior securities will decline (constant money rate level assumed). By the same token, the common stock of a company which has been impaired in quality because of a relatively sharp increase in the amount of outstanding senior securities cannot reasonably be expected to normally sell in the open market at as high an earnings multiple as it previously did.

If at the close of the expansion period the common stock of Company A were selling at 13.9 times earnings and that of Company B at 13 times, the market prices, etc., in table, page 881, would result.

## ADVANTAGES OF HIGH DEBT AND PREFERRED STOCK FINANCING

Based on these assumptions, the common stockholder of Company B, at the close of the expansion period, would have a common stock selling at  $58\frac{1}{2}$ ,  $4\frac{1}{2}$  points or 8 per cent in excess of the market price of the common of Company A; however, if Company B were limited to a 6 per cent rate of return its adjusted share earnings would be \$4.14 and such earnings, at 13 times, would command a market price of  $53\frac{1}{2}$ , which is virtually identical with the market price of the common stock of Company A at the close of the expansion period.

THE wisdom of turning to a high debt ratio to finance expansion is open to serious question. Because of the income tax deductibility of interest payments the effect is to increase operating income and rate of return. This, in turn, could put pressure on rate schedules particularly if the cost of capital is reduced.

Stepping up the long-term debt and preferred stock ratios adversely affects the asset and earnings coverages of present holders of senior securities.

If a company is earning a reasonable rate of return and elects to finance a relatively large part of future construction through the medium of debt securities and preferred stock it will in all likelihood show relatively larger common share

earnings; however, the price times earnings ratio in the open market is likely to shrink somewhat. If, in addition, there were some reduction in rates or a rate increase in some future year was less than the amount which might have been otherwise obtained because of embracing the high debt principle, the common stockholder, in terms of market value of his shares, might be no better situated than he would be if more conservative methods of financing construction had been pursued.

Nevertheless, there is a very real place for preferred stocks in financing utility expansion programs and such securities are entitled to a place in a well-rounded investment plan.

### Preferred Stock as a Financing Vehicle

THIS analysis considers preferred stock as a financing medium. The general observations and concluding comments are limited to straight preferreds as distinguished from an issue carrying a conversion feature. Wherever the expression "investor-owned electric utilities" is used, reference is to the class A and class B privately owned electric utilities in the United States as reported by the Federal Power Commission, which account for some 98 per cent of industry operating revenues and assets.



|  | Company A            | Company B            |
|--|----------------------|----------------------|
| Share earnings at start of expansion period .....                          | \$3.41               | \$3.41               |
| Market prices ( $13.9 \times$ earnings) at start of expansion period ..... | 47 $\frac{1}{2}$     | 47 $\frac{1}{2}$     |
| Share earnings at close of expansion period .....                          | \$3.86               | \$4.47               |
| Market price at close of expansion period .....                            | 53 $\frac{1}{2}$     | 58 $\frac{1}{2}$     |
| Mean average share earnings .....  | \$3.63               | \$3.94               |
| Mean average market price .....  | 50 $\frac{1}{2}$     | 52 $\frac{1}{2}$     |
| Ratio of mean average share earnings to mean average market price ..       | 7.2%                 | 7.5%                 |
| 90 per cent of mean average market price .....                             | 45 $\frac{1}{2}$ (1) | 47 $\frac{1}{2}$ (2) |

- (1) The sale of approximately 769,000 common shares at this figure would yield \$35 million.  
 (2) The sale of approximately 526,000 shares at this net price would yield \$25 million.

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### *Postwar Construction Financing*

THE total capitalization and surplus of the investor-owned electric utilities rose from \$13.2 billion on December 31, 1945, to \$33 billion on December 31, 1957, an increase of \$19.8 billion.

Approximately 55 per cent of the additional capital was obtained from the sale of debt securities, only 9 per cent from the sale of preferred, 24 per cent from the sale of common, 10 per cent stemmed from earned surplus accretions, and 2 per cent from surplus restricted for deferred income taxes.

|                                | <i>Added Capital</i> |                 |
|--------------------------------|----------------------|-----------------|
|                                | <i>Amount</i>        | <i>Per Cent</i> |
|                                | <i>(Millions)</i>    | <i>Of Total</i> |
| Increase in Long-term Debt ..  | \$10,910             | 55%             |
| Increase in Preferred Stock .. | 1,703                | 9               |
| Increase in Common Stock       |                      |                 |
| and Capital Surplus .....      | 4,835                | 24              |
| Increase in Earned Surplus ..  | 1,952                | 10              |
| Surplus Restricted for         |                      |                 |
| Deferred Income Taxes ..       | 403                  | 2               |
| Total Increase in Capital and  |                      |                 |
| Surplus between December       |                      |                 |
| 31, 1945, and December         |                      |                 |
| 31, 1957 .....                 | \$19,803             | 100%            |

### *Preferred Stock Ratio Dwindling*

ALTHOUGH some increase occurred in the amount of preferred stock outstanding in each year since 1946, the dollar amounts outstanding, expressed as a percentage of total capitalization and surplus, have declined without interruption in each of the postwar years.

| <i>Dec. 31st</i> | <i>Preferred Capital Stock</i> | <i>Outstanding</i>        |
|------------------|--------------------------------|---------------------------|
|                  | <i>Amount</i>                  | <i>Per Cent of</i>        |
|                  | <i>(Millions)</i>              | <i>Capitalization and</i> |
|                  |                                | <i>Surplus (Books)</i>    |
| 1957             | \$3,774                        | 11.4%                     |
| 1956             | 3,687                          | 12.2                      |
| 1955             | 3,462                          | 12.3                      |
| 1954             | 3,281                          | 12.4                      |
| 1953             | 3,084                          | 12.8                      |
| 1952             | 2,897                          | 13.0                      |
| 1947             | 2,122                          | 15.0                      |
| 1945             | 2,071                          | 15.7                      |

### *Resulting Capitalization Ratios*

As a result of the emphasis on financing the postwar construction program of the investor-owned electric utilities, notably through the medium of debt securities, the percentage of total capitalization and surplus represented by long-term debt has *increased* by approximately five percentage points, the ratio of preferred stock capital has *declined* by four percentage points, and the common equity (including surplus reserved for deferred income taxes) has *declined* by one percentage point. (See table, page 883.)

### *Relative Cost of Senior Money*

THE postwar trend to a higher debt ratio is undoubtedly the product of two major factors:

(a) Interest is an income tax deduction. With a 52 per cent federal normal and surtax rate the so-called effective interest cost is a maximum 48 per cent of the coupon rate. It is less in states or areas having a corporate or territorial income tax.

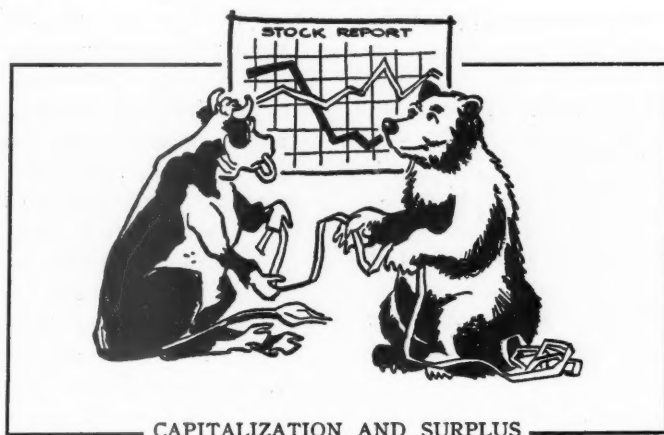
(b) The face as well as the effective tax cost of debt money is relatively low (both interest and preferred dividend payments are "below-the-line" deductions).

(1) The average interest rate on long-term debt of the investor-owned electric utilities was approximately 3½ per cent in 1957. (The postwar low was about 2.90 per cent in 1950 and 1951.)

(2) The average preferred dividend rate of the investor-owned electric utilities was about 4.50 per cent in 1957. (Well-timed sales of preferred by a number of companies are reflected in the foregoing figure; the average pre-



## ADVANTAGES OF HIGH DEBT AND PREFERRED STOCK FINANCING



| <i>Amounts (Million)</i>     | <i>Dec. 31, 1957</i> | <i>Dec. 31, 1945</i> | <i>Per Cent Increase</i> |
|------------------------------|----------------------|----------------------|--------------------------|
| Long-term Debt .....         | \$17,051             | \$ 6,141             | 178%                     |
| Preferred Stock .....        | 3,774                | 2,071                | 82                       |
| Common Equity .....          | 12,186*              | 4,996                | 144                      |
| <b>Total .....</b>           | <b>\$33,011*</b>     | <b>\$13,208</b>      | <b>150</b>               |
| <i>Capitalization Ratios</i> |                      |                      |                          |
| Long-term Debt .....         | 51.7%                | 46.5%                |                          |
| Preferred Stock .....        | 11.4                 | 15.7                 |                          |
| Common Equity .....          | 36.9*                | 37.8                 |                          |
| <b>Total .....</b>           | <b>100.0%</b>        | <b>100.0%</b>        |                          |

*Note:* \* Includes surplus restricted for deferred income taxes of \$403 million.



ferred dividend rate has held fairly constant at between 4.5 per cent and 4.6 per cent in the past decade.)

### *Cost of Common Stock Capital*

THE true cost of attracting common stock money is the normal earnings-price ratio with an allowance for market pressure, "rights" value, and underwriting spread and expenses, rather than the ratio of dividend to market price. A company that sells additional common stock and temporarily dilutes per share earnings, can only make the common stockholder "whole" again by bringing its share earnings back to at least the level

which obtained prior to the financing. Earning the dividend rate alone on the enlarged number of shares (assuming the pay-out rate is less than 100 per cent) would result in permanent dilution of share earnings, subject the management to criticism, and, in time, adversely affect the credit rating.

In contemporary times, the typical electric utility common stock has sold at around 14 times earnings, which is an earnings-price ratio of about 7.2 per cent. If a 10 per cent allowance is made for market pressure, "rights" value, and underwriting costs, the cost of attracting additional money through the medium of

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common stock offerings may be placed at around 8 per cent.

### *Preferred Stocks Not Uncommon*

**A**N overwhelming majority of utility companies have employed preferred stocks as a financing medium:

(a) Analysis of capital structures of 118 electric utility operating companies reveals that 110, or 93 per cent, of the companies have preferred stocks outstanding.

(b) The great bulk of the natural gas pipeline companies have sold preferred stocks. Approximately half of the natural gas distribution companies, in which there is an active common stock interest in the financial markets, have sold preferred stocks.

(c) Many independent telephone companies have sold preferred stocks, including subsidiaries of General Telephone Corporation, the leading independent. (AT&T adheres to a capitalization philosophy of approximately one-third debt and two-thirds common equity.)

To single out a major among the sophisticated investors it may be noted that the United States life insurance companies owned nearly \$900 million of utility preferred stocks on December 31, 1957, as compared with \$300 million ten years earlier. Such investments tripled in the decade—their total assets doubled.

**F**ROM the standpoint of the issuing company, preferred stock is viewed as a sound device for financing a part of the continuing construction programs of public utility companies:

(a) The cost of preferred stock money is normally less than the cost of additional common stock money.

(b) The cost of preferred stock money is normally less than the rate of return which a realistic rate-making agency will allow in the way of overall rate of return. Whenever this occurs, the leverage factor inherent in the capital structure works for the benefit of the common stockholder.

(c) Preferred stock capital is equity capital and builds up a solid cushion back of and for the benefit of the holders of the long-term debt securities.

(d) The end result of a preferred dividend default is considerably less severe than would be the case in the event of a default on a fixed obligation.

(e) Preferred stock is permanent capital except in the event of a sinking fund or purchase fund. In the latter cases the preferred stock, nevertheless, is long-term capital.

(f) Equity capital should be built up in a dynamic economy so that debt securities can be more readily sold during periods of stringency.

**M**ANY investors regard a preferred stock as a hybrid type of security. Admittedly, preferred stocks lack the protection of a debt security, do not enjoy the possible benefits of a common equity, and voting privileges are relatively limited; however, the dividend rate and sheltered position in the capital structure are compensating features. Moreover, where a sinking fund or purchase fund exists there is, in effect, a maturity date or price support. Preferred stocks are, of course, generally senior to the common stock both from the standpoint of assets

## ADVANTAGES OF HIGH DEBT AND PREFERRED STOCK FINANCING

and earnings at specified rates. It should be noted from the standpoint of the issuing companies that a point can arrive from time to time at which it would be shortsighted for management not to tailor the provisions of preferred stock issues to the requirements of the investing public.

**T**HE long-term debt ratio of investor-owned electric utilities has risen by approximately five percentage points in the postwar period largely as a result of a four-point decline in the preferred stock

ratio. The amount of preferred stock sold in the postwar period is estimated at \$1.7 billion, which may be compared with estimated common stock sales of \$4.8 billion. If debt had been confined to the present level and no preferred had been sold in the postwar years, it would have been necessary for the industry to sell 35 per cent more common than the amount actually sold. This could have had serious repercussions. The view here is that there is a definite place for utility preferred stocks in well-rounded investment accounts.

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### Censorship through Taxation

**“**ASK anyone what the Internal Revenue Service is and you'll get some such answer as this: 'It's a federal administrative agency, whose duty is to collect taxes as provided in revenue laws passed by Congress.'

*"But the Internal Revenue Service is going far afield from its proper and established function. It is, in effect, setting itself up as a censor of what enterprises and organizations may say in their advertising, on pain of heavy tax penalties. It is also making decisions that are purely within the province of business management.*

*"Here is the remarkable and menacing story.*

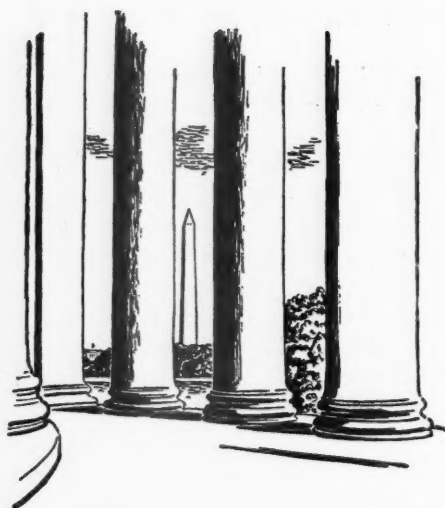
*"Internal Revenue Service has ruled that electric utility companies cannot regard the cost of institutional advertising, which presents their side of the public VERSUS private power controversy, as a legitimate business expense, deductible in income tax returns.*

*"Internal Revenue Service has also ruled that the cost of literature opposing Socialism issued by one of the country's most respected professional organizations, the Association of American Physicians and Surgeons, is not exempt from tax.*

*"Internal Revenue Service has also disallowed public relations advertising placed over a four-year period by the Timken Roller Bearing Company. This advertising discussed the Bill of Rights, Capitalism VERSUS Socialism, principles of taxation, and other such matter.*

*"In other words, Internal Revenue Service holds that advertising designed to sell products or services is a legitimate business deduction—but that advertising designed to maintain an economic and political climate in which private enterprise may successfully produce those products and services is not. It is attempting to muzzle the right of people to speak their minds freely and without penalty—and, in doing that, to prevent other people from knowing and weighing both sides of controversies."*

—EDITORIAL STATEMENT,  
*Industrial News Review.*



### *Canadian Gas Exports*

**T**HE recommendations of Canada's Borden Commission, which has been studying proposals for exportation of Canadian natural gas, have come as something of a disappointment to American natural gas companies which have been hoping to supply northern U. S. communities with gas drawn from Canada's enormous reserves. In any event, the report of the Borden Commission has put off for the time being a final solution to the long-drawn-out, complicated "Midwestern" natural gas case which has been before the FPC.

The FPC, which several weeks ago took the "Midwestern" case out of the hands of its examiner in order to expedite a final determination on competitive proposals to supply upper midwestern states with gas from Canada, early this month refused to approve the application of Midwestern Gas Transmission Company. The FPC's decision to eliminate the intermediate decision procedure in the case of Midwestern was done at the request of Midwestern, whose contract with its proposed supplier, Trans-Canada Pipe Lines Ltd., called for higher rates after

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November 1st, if Midwestern's proposals to import Canadian gas had not been approved by the FPC by that date.

A decision in favor of Midwestern by the FPC would have been superfluous, however, in view of a recommendation of the Borden Commission with respect to Trans-Canada's proposal to export gas to the U. S. The Trans-Canada-Midwestern contract had been based on a promise, made by the former Liberal government in Canada, that Trans-Canada would be granted an exportation license. A key recommendation of the Borden Commission to the Conservative government of Prime Minister Diefenbaker is that the promise to Trans-Canada be ignored. Instead, said the Borden report, Trans-Canada's proposal, along with other exportation proposals, should be considered on its merits by an energy resources board whose creation the report recommends. This would have to be done by Parliament, which does not meet until January.

**T**HE national energy board proposed by the Borden Commission would have authority to regulate all phases of energy resources, especially in so far as

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exports and exploitation are concerned. The commission gave its approval to exportation of Alberta natural gas, but recommended that licenses be granted for periods not to exceed twenty-five years. One odd feature of the Borden report is its apparent approval of a dual form of regulation. The proposed Energy Board would have the power to "grant, revoke, or suspend" licenses for the export or import of energy resources and the interprovincial transport of such resources. However, the power to regulate prices, tolls, and tariffs of gas and oil pipeline companies, would be left to the Canadian Board of Transport Commissioners. The report suggested that this latter board be required to make a complete review of all existing prices, tolls, and tariffs at least once every two years.

Prime Minister Diefenbaker has promised quick action on the Borden recommendations, at the same time pointing out that they are not binding on the government. One thing Diefenbaker is certain to consider is the effect on American investment in Canada if the Borden report's suggestion with respect to the promise made to Trans-Canada by a former government is adopted. Refusal to honor or recognize the pledge of the previous government, along with rejection of the exportation proposal altogether, would be bound to have a disturbing effect on the confidence of United States investors in Canadian enterprise.

### *Co-op Loan Challenged*

THE General Accounting Office, watchdog of the federal Treasury, has refused to back down from its position that a portion of an electric loan made to an Iowa co-op by REA is illegal. At issue is part of an \$11 million loan made to Cen-

tral Iowa Power Co-operative for a transmission line to serve a new plant of a sewer pipe and tile company. The new plant had been built only 160 feet away from the company's original plant, which was already receiving service from a commercial electric utility company. This company, Iowa-Illinois Power Company, challenged the validity of the loan but lost in a court test on the technical ground that the company, not being a party to the loan contract, had not proven sufficient direct interest in the case to maintain a suit in court.

In making the loan, REA chose to regard the sewer pipe company's new plant as a "person" not receiving central station service, and approved \$120,000 in the loan to enable the co-op to supply the new plant. Comptroller General Joseph Campbell took the position that such an interpretation of the law violates the spirit and purpose of the Rural Electrification Act. In a letter to the Secretary of Agriculture, he noted that the act prohibits loans for the paralleling of existing systems or creating competition with existing facilities ready and able to provide adequate service.

AT the urging of the Department of Agriculture and the National Rural Electric Co-operative Association, Campbell agreed to review his decision. He has now done so, and, except for a few clarifications, has refused to change his opinion that the loan was invalid. That opinion, as stated in his original decision, is as follows:

... the purpose of the central station service limitation was to exclude loans for the paralleling of existing systems or creating competition with existing facilities by prohibiting the use of loan funds for construction of transmission



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lines and substations to furnish power to an area already served by private power companies when such companies are willing to provide adequate central station service to persons within the area who are not tied to the power lines.

Campbell did clear up one point over which there has been some dispute. This concerns the meaning of "unserved person" in the REA Act. According to Campbell, an "unserved person" within the limitation of the act means a person not located on or adjacent to existing power lines. Originally, Campbell had asked that the \$120,000 be deducted from the loan and that immediate steps be taken to recover the money. However, since the money has apparently been spent, Campbell said no action need be taken now to recover it. He said the matter would be included in GAO's report to Congress next year.

### *Producers to Seek New Gas Law*

NATURAL gas producers will revive efforts next year to obtain congressional approval of legislation removing their operations from utility-type federal regulation. "I still think a good natural gas bill can be passed," Russell B. Brown, general counsel of the Independent Petroleum Association of America, told the twenty-ninth annual meeting of independent oil and gas producers in Dallas, Texas. Although there has been speculation that there would be no producers' drive for such a bill next year, apparently there is belief in the industry that there are a sufficient number of legislators in Congress sympathetic to the industry's

case to warrant another campaign for a Harris-O'Hara-type bill.

The producers will also turn their attention toward building up support for the present 27½ per cent depletion allowance on taxes as applied to oil and gas operations. Jake L. Hamon, independent oil man and former chairman of the board of the American Petroleum Institute, pointed out that the debate in the Senate last year on the depletion allowance "reveals that it is politically popular to lambast the oil man. Unless that can be changed we are in for serious trouble next year," he warned.

### *Atomic Energy Survey*

THE Bureau of the Census, in co-operation with the Atomic Energy Commission, has started sending out questionnaires to collect statistical information from private atomic energy manufacturers and processors to determine the extent of U. S. industrial participation in the program for the peaceful uses of atomic energy.

All companies manufacturing reactors, reactor components, fuel elements and other products in the atomic energy industry and processing radioisotopes and ores will be asked to contribute data.

Industrial representatives, who met at the invitation of the Advisory Council on Federal Reports in Washington on August 28, 1958, to discuss the survey, endorsed the plan. The Advisory Council on Federal Reports was organized in 1942 at the request of the Director of the Bureau of the Budget and advises the bureau on methods of improving federal questionnaires, reporting procedures, and statistical programs.

# Telephone and Telegraph

## *FCC Allows Rate Case Change*

THE Federal Communications Commission on October 29th conditionally authorized American Telephone and Telegraph Company to revise its proposals for increasing rates on AT&T private line teletypewriter service. But the FCC cautioned the company that the revisions would be subject to two public protests and possible suspension. This caution was prompted by an AT&T notice that if it is granted permission to revise its original proposals, it will seek to make the new rates effective thirty days after the date of filing.

The American Newspaper Publishers Association, major stock and commodity exchanges, and other major users of teletypewriter service, have said no rate change should be permitted until the question has been fully reviewed at public hearings. These usually take months. AT&T last August said its earnings from teletypewriter service were excessively low. It proposed new rates to be effective October 1st, designed to increase its revenues by about \$11 million a year or 26 per cent.

As a result of protests by the major users, FCC suspended the proposed increases until January 1st and ordered an investigation. AT&T then applied for au-



thority to withdraw the August proposals and substitute new ones designed to yield \$9.5 million, or about 22 per cent more revenue from this service.

## *Army Unveils Fast Teletypewriter*

A TELETYPEWRITER running at a speed of 3,000 words a minute was shown in New York on October 28th by the Army. That is twenty times as fast as most people can talk. In theory, the electronic device can operate at a speed of a half-million words per minute—the equivalent of typing the entire Bible (774,746 words) in a minute and a half. The mechanism will go that fast or faster, but what baffles the experts is how to pass the roll of paper past the printing anvil fast enough. The specification for the machine was prepared by the U. S. Signal Corps and it was built by the Burroughs Corporation.

The Army intends to communicate at only 750 words a minute, and is assembling a series of devices to co-ordinate at this speed, such as the 750-words-a-minute typing reperforator introduced last summer. Other devices geared for this transmission rate—as compared to gen-

## PUBLIC UTILITIES FORTNIGHTLY

eral news service transmission speed of 60 words a minute—are said to be near the announcement stage.

What the Burroughs Corporation built was a device that a scientist gave the rare term of "Ultimate." The teletypewriter operates with no moving parts except those which pass the paper before an electronic gun that shoots the letters onto the special paper. After the volley of letters, each line of text passes rapidly over powdered ink and a heated roller, and appears a split second later as clear text. Impulses to activate the device can be transmitted over voice-quality telephone circuits or short-wave frequencies. The device is about the size of a spinet piano.

### *Transoceanic TV Needs Cash*

"**T**RANSOCEANIC TV is now technically possible," recently explained a spokesman for Bell Telephone Laboratories, Inc. But he privately noted that high costs, the early state of the technological art, and no real commercial demand for over-the-Atlantic TV place the advent of such a system four to ten years away. Scientists have already developed for such traffic over-the-horizon transmission of TV signals utilizing the process of "troposcatter." This involves bouncing TV signals off the troposphere, a gaseous blanket in the air five to ten miles above the surface of the earth. Some of the signals that strike the troposphere are scattered forward and drop back to earth where they are received, amplified, and retransmitted to another relay station. Current over-the-horizon links are limited to about 250 miles.

Scientists meeting in Detroit last month for the annual meeting of the Society of Motion Picture and Television Engineers detailed some of their schemes for an over-the-Atlantic TV relay system.

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"We're far enough along that what we have right now may prove to be adequate," says Edwin Dyke, assistant engineering director for Page Communications Engineers, Inc., Washington, D. C. He notes that a proposed project that Page is working on already has a name, Narcom, or North Atlantic Relay Communications system. Under the plan, about ten relay stations in Canada, Iceland, Denmark, and England would skirt the North Atlantic.

At present the only operating commercial overseas over-the-horizon link is the 185-mile span between the U. S. and Cuba, run jointly by AT&T and International Telephone & Telegraph Corporation. It handles two-way TV signals, radio and telephone conversations. And Florida Micro Communications, Inc., is installing a troposcatter relay system from Florida City, Florida, to a location near Havana, Cuba.

**T**o boost the distances between over-the-horizon links bouncing signals off the troposphere—the earth's curvature prevents direct TV signal transmission over long distances—scientists have also developed new low-noise amplifiers, named Mavar, for microwave amplification by variable reactance. These amplifiers, still largely in the laboratory and prototype development state, are expected to reduce the problem of "snow" on TV images transmitted over long distances. The snowy effect on the image is caused by noise in the microwave link receiver. The Mavar method would cut down the noise level and allow increased distances between relay stations. It would also make snowy pictures about four times clearer, scientists said.

Devices utilizing the Mavar principle have been developed by a Stanford University electronics research team, Zenith

## TELEPHONE AND TELEGRAPH

Radio Corporation, Chicago, Illinois, IT&T, and Bell Laboratories. IT&T recently announced it will field test a low-noise amplifier that extends the long range to 350 miles from the present 250-mile limit.

### *FM Radio Side Lines Hit*

THE American Telephone and Telegraph Company in a statement submitted to the FCC has criticized the possible expansion of FM radio broadcasting stations into incidental subsidiary operations. The FCC is making an inquiry into such so-called "side line" services which can be conducted by FM radio broadcasting stations simultaneously and without interference with or interruption of routine program service.

The so-called "side line" services may include paging, the relay of time, weather, or other coded broadcasting signals, traffic light controls, broadcast relay service, and a number of other possible uses of multiplexed FM signals. The AT&T statement was filed along with others which asked that the FCC curb the extent to which FM stations might be permitted to engage in such collateral activity. The radio broadcasting stations, according to the FCC filing, should not be allowed to operate "public communications services as a side line."

The Bell system comments contended that the "privilege accorded FM broadcast stations of engaging in subsidiary communications should not be expanded in such a way as to break down the important long-standing distinctions between unregulated broadcasters and regulated common (telephone) carriers."

### *Another TV Case Remanded*

THE Supreme Court on October 27th by a vote of 7 to 2 directed a lower court to look into the charges of irregular procedure in another Florida television case. Involved is an allegation that ex-Commissioner Mack of the FCC listened privately to one side in a contest for a Channel 9 permit in Orlando.

The FCC in June, 1957, had awarded a permit to Mid-Florida Television Corporation. In so doing, the commission rejected a recommendation by a hearing examiner in favor of the competing application by WORZ, Inc. Mid-Florida has been on the air since last February as WLOF-TV.

The United States court of appeals for the District of Columbia circuit last May affirmed the FCC's decision, and WORZ carried the case to the Supreme Court. The highest court, however, vacated the decision of the appellate court and sent the case back to it "for such action as it may deem appropriate."

During a House subcommittee investigation into alleged wirepulling in government regulatory agencies, a subcommittee investigator testified that William H. Dial had communicated with Mack in behalf of Mid-Florida. The subcommittee chairman, Oren Harris, called Dial's contact improper but not illegal.

The station's attorneys in Washington after the October 27th high court action, issued a statement saying the action was in "a pattern now being followed by the courts requiring the commission to investigate any case which was mentioned during the (House) hearings . . . regardless of the nature of the circumstances involved."



## Financial News and Comment

By OWEN ELY

### *Midwestern Gas Plans Being Revamped*

FURTHER delays in providing for the backlog of demand in the Midwest for industrial and house-heating gas now seem inevitable. The Borden Commission of Canada, in its first report, has found that Trans-Canada does not now have enough gas under contract to supply present Canadian needs and also sell 200 million cubic feet a day at the Canadian border to the proposed Midwestern subsidiary of Tennessee Gas. The previous government of Canada had promised this gas, in return for Tennessee's important help in expediting the construction of Trans-Canada; but the commission holds that in the three years' time which have elapsed, the needs of eastern Canada have increased and that the export of gas at Emerson, Manitoba, would not be warranted until Trans-Canada develops contracts for additional supplies. (See, also, page 886 for news developments in this field.)

Meantime, the Federal Power Commission met a November 1st "deadline" by reaching an adverse decision after its long-drawn-out study of Tennessee's pipeline proposal, and alternate plans of other U. S. utilities to serve the Northwest were also vetoed. The November 1st date marked the time when the price for Canadian gas would automatically in-

crease, unless the FPC had approved the plan by that date. The FPC decision came on the heels of the Borden report, but the commission said that its findings were not affected by the report of its Canadian counterpart.

WHILE the FPC indicated that it favored importation of gas from Canada, it refused to grant Midwestern's pending application. The commission felt that in future other companies beside Midwestern might be able to obtain supplies of gas from Canada, and it indicated its hopes that eventually there would be a broad interconnection of pipelines "from the Gulf (of Mexico) to Canada across the breadth of the United States."

Tennessee Gas immediately filed new plans. The proposed Midwestern pipeline would supply 360 million cubic feet of gas daily to the Chicago-Gary area, bring-

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ing all the gas from its interconnection with Tennessee.

The natural gas will be sold to three local utilities which, in turn, would supply gas to steel companies, as well as retail customers. (Under the original plan, Midwestern would have sold direct to the steel companies.) Midwestern would apply within two months for permission to build a separate line from the Canadian border to service Minnesota, Wisconsin, upper Michigan, and parts of North Dakota with Canadian gas. Midwestern is said to be conferring with Northern Natural Gas and other companies regarding their possible participation in the new project. The amount of gas to be sought from Canada has not been mentioned.

**M**IDWESTERN had earlier proposed to import about 200 million cubic feet of gas from Canada and provide a similar amount of U. S. gas from Tennessee, the combined amount to be sold at wholesale to steel companies around Chicago and also to 127 communities in Minnesota, Wisconsin, Michigan, and North Dakota. It is possible that the Canadian government may be willing to consider a new arrangement (once added supplies are arranged for) since the Borden Commission has stated that "any future request . . . would be considered on its merits."

In rejecting the Midwestern plan, the FPC cleared the boards by also rejecting the plans of competing utilities. Northern Natural Gas had proposed to serve 73 communities in Michigan and Wisconsin, but the FPC rejected the plan because a proposed storage project at Redfield, Iowa, would not be adequate. The Michigan-Wisconsin project, the smallest of the three, was rejected because the company failed to prove "economic feasibility."

### *Borden Commission Critical of Canadian Pipeline Financing, Urges Rate Regulation*

**T**HE Borden Royal Commission's first report includes an immense amount of statistical and financial data on Canadian gas resources and the financing of Canadian pipelines. Various estimates of the gas reserves in western Canada, in trillions of cubic feet, are mentioned as follows:

| Authority                            | Proved | Probable | Ultimate |
|--------------------------------------|--------|----------|----------|
| Canadian Petroleum Association ..... | 20.55  | 9.67     | 300      |
| British American Oil Company .....   | 27.5   | —        | 308.4    |
| Westcoast Transmission Company ..... | —      | —        | 170-300  |
| Shell Oil Company of Canada .....    | —      | —        | 300      |

Alberta has established the greater proportion of the proven reserves and in the immediate future "this Province must be considered as the major potential source of natural gas for all Canadian markets east of the Saskatchewan-Manitoba border."

After projecting ahead to 1987 the increasing Canadian demands for gas from Alberta, and assuming an annual discovery rate of 2 trillion cubic feet of gas annually during this period, the commission concluded that the supply should be ample to permit at least moderate exports to the United States. "With reasonable access to United States markets, expectations of earnings in the industry would be raised to a level which would encourage further sound development." However, the commission at this time does not favor exports to the U. S. through the proposed Midwestern pipelines at the Manitoba border, and it is critical about allowing additional amounts to Westcoast except at higher prices.

The commission reviewed the financial history of Westcoast, and con-

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cluded that promoters had received substantial amounts of stock at nominal prices, indicating the possibility of extremely large capital gains. Hence it held that any future pipeline developments should not follow the pattern of the Westcoast financing. It suggested that the Board of Transport Commissioners should determine whether or not Canadian consumers of natural gas "are subsidizing in any way the sale of gas to the Pacific Northwest. . . . shareholders of Westcoast should not look for disproportionate profits from sales made to Canadian consumers."

The implication of the report seems to be that the adjustment for any inequalities under the existing contract between Westcoast and Pacific Northwest should be taken care of by charging prices for additional gas at a high enough level to offset any inadequacy in the present contract.

IN other words, future sales should provide total revenues adequate to provide a full proportionate share of costs plus a fair return on capital. The commission will apparently not attempt to modify the existing contract, but will



## CALENDAR OF PROPOSED UTILITY OFFERINGS\*

November 15th-December 31st

| <i>Date of Bidding Or Sale</i>             | <i>Approx. Amount (Millions)</i> |  | <i>Method Of Offering</i> | <i>Probable Moody Rating*</i> |
|--|----------------------------------|--|---------------------------|-------------------------------|
| <b>Bonds and Debentures</b>                |                                  |  |                           |                               |
| 11/18                                      | \$80                             | Pacific Tel. & Tel. Deb. 1990 .....          | C                         | Aa                            |
| "  | 20                               | Utah Power & Light Mtge. Bonds 1988 .....    | C                         | A                             |
| 12/1                                       | 35                               | Southern Natural Gas .....                   | —                         | A                             |
| 12/9                                       | 70                               | Southern Bell T. & T. ....                   | C                         | Aaa                           |
| 12/10                                      | 40                               | Philadelphia Electric .....                  | C                         | Aaa                           |
| 12/16                                      | 13                               | Texas Power & Light .....                    | C                         | Aa                            |
|  | 4                                | Eastern Utilities .....                      | C                         | Baa                           |
|  | 5                                | Washington Natural Gas .....                 | N                         | Baa                           |
|  | 40                               | New England Tel. & Tel. ....                 | C                         | Aaa                           |
|  | 70                               | New York Telephone .....                     | —                         | Aaa                           |
|  | 20                               | Montana Power Mtge. Bonds 1988 .....         | C                         | Aa                            |
|  | 17                               | Gulf States Utilities Mtge. Bonds 1988 ..... | C                         | Aa                            |
|  | 10                               | Laclede Gas Mtge. Bonds .....                | C                         | A                             |
|  | 20                               | Northern Illinois Gas .....                  | C                         | A                             |
|  | 10                               | Kentucky Utilities .....                     | C                         | A                             |
|  | 7                                | Citizens Utilities .....                     | —                         | Baa                           |
|  | 8                                | Arizona Public Service .....                 | —                         |                               |
|  | 10                               | Kansas P. & L. ....                          | C                         | Aa                            |
|  | 20                               | Coastal Transmission .....                   | N                         |                               |
| <b>Preferred Stocks</b>                    |                                  |  |                           |                               |
|  | 25                               | Commonwealth Edison .....                    | N                         |                               |
|  | 8                                | New England Power .....                      | C                         |                               |
|  | 5                                | Wisconsin Public Service .....               | N                         |                               |
|  | 15                               | Consumers Power .....                        | N                         |                               |
|  | 5                                | Rochester Telephone .....                    | —                         |                               |
| <b>Common Stock—Subscription Offerings</b> |                                  |  |                           |                               |
|  | 6                                | Rochester Gas & Electric .....               | N                         |                               |
| Nov.                                       | 159                              | Pacific Tel. & Tel. ....                     | **                        |                               |
|  | 24                               | General Public Utilities .....               | —                         |                               |
| <b>Common Stock—Offered to Public</b>      |                                  |  |                           |                               |
|  | 25†                              | Union Electric .....                         | C                         |                               |
|  | 8†                               | Columbus & Southern Ohio Electric .....      | —                         |                               |
| 12/2                                       | 24                               | Public Service E. & G. ....                  | —                         |                               |

\*Between November 3rd and November 25th on three days' notice. \*\*No underwriter—to be offered to holders of preferred and common stock on a 1-for-8 basis. N—Negotiated. C—Competitive. † Approximate.

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make sure that conditions are remedied in any new contracts. Greenshields & Co. in its comment on the report concludes that it also will prepare the way for the proposed new gas transmission line from southern Alberta to San Francisco. However, no action on this or any other project is likely to be taken before the next session of Parliament, opening in mid-January.

THE involved history of the financing and construction of Trans-Canada Pipe Lines was also reviewed in great detail, but here the commission felt that no special measures need be taken to safeguard the interests of Canadian producers or consumers of gas.

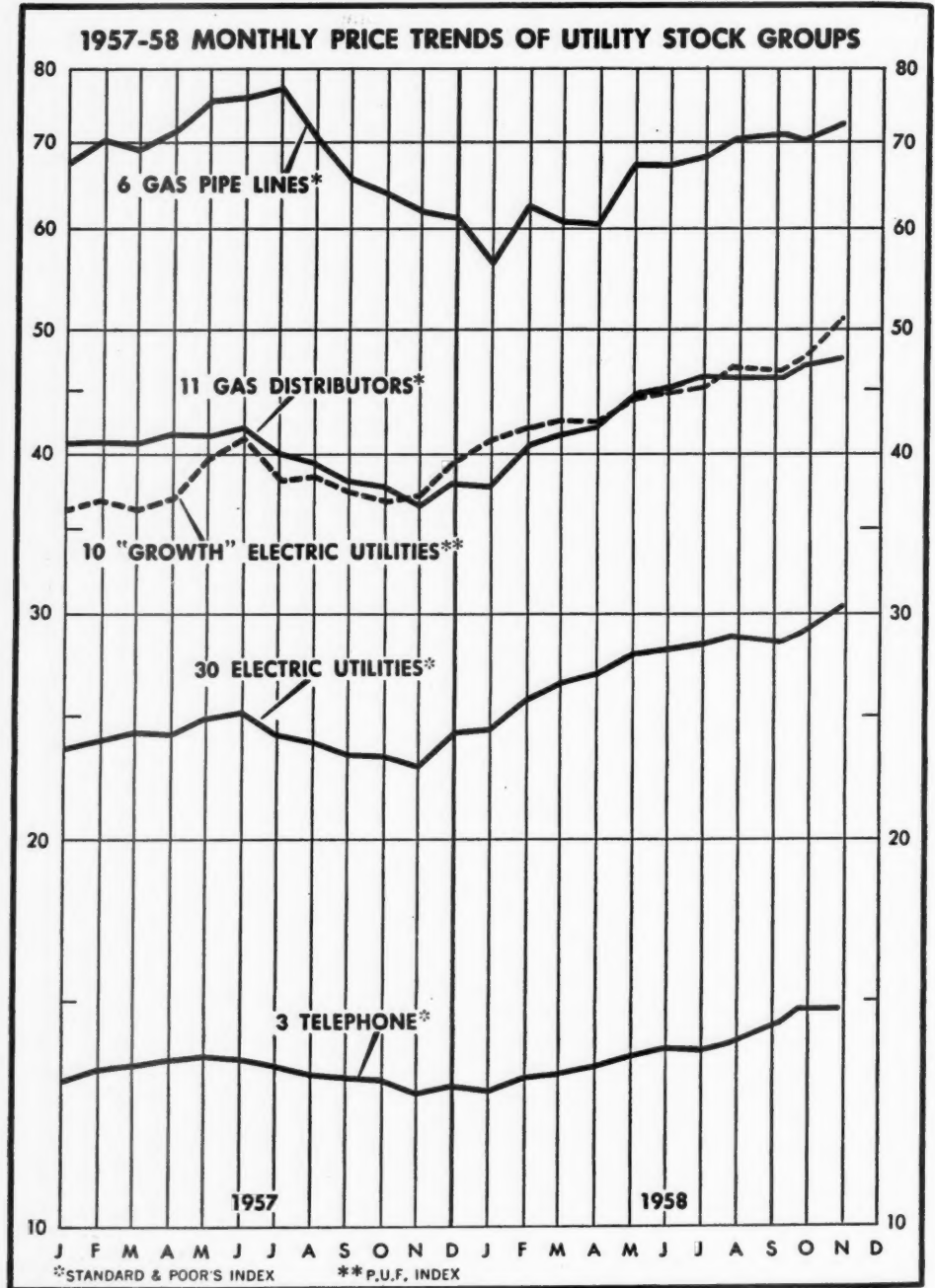
The commission suggested that a "National Energy Board" be set up to exercise control over the import-export movement of oil, gas, electric energy, etc., as well as their movement across provincial boundaries. The Energy Board would also compile, study, and review the location and availability of various sources of energy and maintain an up-to-date inventory. It would study the economic feasibility, financial structure, and ownership of any proposed new pipeline. The new board would co-operate with the Federal Power Commission in the United States, and exchange "observers" with that commission when matters of mutual interest were being considered. However, the Board of Transport Commissioners would continue to have full regulatory jurisdiction over the interprovincial pipelines' rates, etc. Thus the proposed new "Energy Board" would handle the transport of gas, while the regulation of rates would remain in the hands of the present "Board of Transport"—although there might be some difficulty in avoiding overlapping functions if the Borden recommendations were carried out.

A complication in the export of Canadian "sour" gas is the importance of by-products such as sulphur, propane, butane, and natural gasoline. The Borden Commission feels that in granting permits for export of gas, there should be some provision for developing export markets also for the by-products. Just how this could be worked out is not very clear at this point.

THE *Financial Post*, the leading Canadian financial journal, comments drastically on the Borden report under the headline "No More Pipelines on Private Capital—Businessmen Blow Their Tops over Energy Commission Recommendation." Thus far the Transport Commissioners have not exercised their powers to regulate rates and the Borden Commission suggests that rates should be based on "a method which ensures a fair rate of return on shareholders' equity." The *Post* emphasizes the apprehension felt in investment circles that this proposed philosophy of rate making would be adverse to earnings prospects for the pipelines, and this has been reflected marketwise in a sharp decline in the stock of Trans-Canada Pipe Lines. Instead of using a fair return on the entire rate base, the customary U. S. method of regulating utilities, the commission proposes using a "fair return" only on the common stock equity.

The Borden Commission's report does not give any hint of the percentage return on common equity which might be considered "fair" but the *Financial Post* calls attention to the fact that only about 8 per cent is allowed the Bell Telephone Company. If such a rate were applied to Interprovincial Pipeline Company, the *Post* estimates that earnings last year would have been limited to about \$1.04 compared with actual earnings of \$1.89.

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IN the United States, an overall rate of return of 6 per cent used to work out at about 10 per cent for common stock equity is as follows:

|                       | Per Cent<br>Of Capital | Cost | Weighted<br>Return |
|-----------------------|------------------------|------|--------------------|
| Long-term Debt .....  | 50%                    | 3.5% | 1.75%              |
| Preferred Stock ..... | 15                     | 4.5  | .68                |
| Common Stock Equity   | 35                     | 10.2 | 3.57               |
| Total .....           | 100%                   | 6.0% | 6.00%              |

Currently, state commissions in some cases have been allowing rates of return of  $6\frac{1}{2}$  per cent or more to compensate for cost of long-term debt around 4.2 per cent, and preferred stock around 5.2 per cent. This leaves the return on common stock equity about unchanged (10.3 per cent instead of 10.2 per cent, using the above formula).

It seems obvious that there is a wide difference between the rate of return which should be allowed on a speculative and promotional enterprise such as a new Canadian pipeline—which cannot realize its full earning power for four or five years—as compared with a long-established stable utility such as Bell Telephone of Canada. Even in the case of the latter company the action of the Diefenbaker government, in intervening to withhold a rate increase, seemed unwarranted. An 8 per cent return would be much too low for a pipeline, and the amazing success in the sale of pipeline equities over the past two years doubtless envisioned much higher returns.

THERE is, however, an encouraging note in the commission's statement that the Board of Transport Commissioners should apply the fair value principle in evaluating pipeline assets, and arriving at the value of the equity to be remunerated. In the case of Trans-Canada the equity ratio is around 21 per cent. Thus, if fair value of net plant were assumed in

some future rate proceeding to be 10 per cent in excess of cost, the assigned value of stockholders' equity might work out at nearly 50 per cent more than book value. On such a basis an 8 per cent return would automatically be lifted to 12 per cent.

### *New Yardsticks for Growth Utilities?*

IN former years (after the excesses of the 1929 era) electric growth utility stocks have customarily sold at about 17 to 20 times earnings, depending on the state of the general market, and the industry average has been in a range of about 14-15 times. Now the yardsticks seem to have lengthened, with price-earnings ratios of 20-24 for growth utilities and over 16 for the industry as a whole; only a few secondary stocks, which have had a rather disappointing record of share earnings, continue to sell around 13-14 times earnings.

Following is a list of stocks with high P-E ratios (which does not include all the stocks usually described as growth utilities):

|                                   |        |
|-----------------------------------|--------|
| American Electric Power .....     | 22.4   |
| Central & South West .....        | 21.2   |
| Duke Power .....                  | 20.9   |
| Florida Power Corp. ....          | 25.2*  |
| Florida Power & Light .....       | 22.9   |
| Gulf States Utilities .....       | 21.4   |
| Houston Lighting & Power .....    | 22.3   |
| Southwestern Public Service ..... | 21.5   |
| Tampa Electric .....              | 25.6   |
| Texas Utilities .....             | 22.1   |
| Virginia Electric & Power .....   | 21.5   |
| Shawinigan Water & Power .....    | 20.9** |

\*Based on a price of 93 for the old stock.  
\*\*Based on earnings for calendar year 1957.

IT will be noted in the chart on page 896 that the FORTNIGHTLY index of ten electric growth utilities has appreciated at a faster rate than the Moody average of thirty electric utilities, since January,



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1957. The market action of the growth utilities seems to be somewhat parallel to that of the industrial growth companies, although some of the latter sell at much higher multiples—IBM, for example, at nearly fifty times earnings. Utilities are merely following the general trend—although if, as sometimes argued, the public is buying stocks as a hedge against inflation, it seems a little inconsistent for them to buy utilities, which might be hurt rather than helped by future runaway inflation. The reason for the popularity of the utility stocks may be that they have demonstrated (in a majority of cases) their ability to survive and even thrive under conditions both of recession and moderate inflation.

### *Early Financial Struggles of Electric Utilities*

At meetings in recent years of the Newcomen Society—which numbers among its members many leaders in U. S. industry—various utility presidents have, on invitation, told the story of their com-

panies' progress through the years. Recently, Louis V. Sutton, chairman and president of Carolina Power & Light Company, in an address before the society gave an interesting reminiscence of his company, on the occasion of its fiftieth anniversary.

In describing the company's beginnings Mr. Sutton pays tribute to the important leadership and aid extended by Electric Bond and Share. The latter company had been formed by General Electric to salvage securities accepted in part payment for electrical equipment. "Under the guiding genius of S. Z. Mitchell," Mr. Sutton stated, "Electric Bond and Share Company set about to help the struggling utilities whose financial conditions often were deplorable and whose managers encountered grave difficulty in financing the rapid expansion which they were facing."

Thus Bond and Share acquired the properties of several small systems supplying lighting and trolley service which were consolidated in 1926 into Carolina Power & Light Company. This company today serves over 400,000 customers.



### DATA ON ELECTRIC UTILITY STOCKS

| Annual<br>Rev.<br>(Mill.) |                               | 10/29/58<br>Price<br>About | Divi-<br>dend<br>Rate | Approx.<br>Yield | Recent<br>Share<br>Earnings | % In-<br>crease<br>1952-57 | Aver.<br>Incr.<br>In Sh.<br>Earnings<br>1952-57 | Price-<br>Earnings<br>Ratio | Div.<br>Pay-<br>out | Approx.<br>Common<br>Stock<br>Equity |
|---------------------------|-------------------------------|----------------------------|-----------------------|------------------|-----------------------------|----------------------------|---|-----------------------------|---------------------|--------------------------------------|
| \$284                     | S American Elec. Power ....   | 50                         | \$1.68                | 3.4%             | \$2.23Au                    | 4%                         | 9%  | 22.4                        | 75%                 | 33%                                  |
| 50                        | O Arizona Public Service .... | 34                         | 1.20                  | 3.5              | *1.89Je                     | 6                          | 7   | *18.0                       | 63                  | 27                                   |
| 11                        | O Arkansas Mo. Power ....     | 21                         | 1.00                  | 4.8              | 1.42Je                      | 7                          | 2   | 14.8                        | 70                  | 32                                   |
| 32                        | S Atlantic City Electric .... | 36                         | 1.40                  | 3.9              | 1.84Se                      | 5                          | 10  | 19.6                        | 76                  | 28                                   |
| 142                       | S Baltimore Gas & Elec. ....  | 43                         | 1.80                  | 4.2              | 2.15Je                      | D4                         | 6   | 20.0                        | 84                  | 43                                   |
| 7                         | O Bangor Hydro-Elec. ....     | 35                         | 1.90                  | 5.4              | 2.24Se                      | D10                        | 4   | 15.6                        | 85                  | 36                                   |
| 6                         | O Black Hills P. & L. ....    | 30                         | 1.44                  | 4.8              | 2.25Jy                      | 4                          | 3   | 13.3                        | 64                  | 30                                   |
| 104                       | S Boston Edison ....          | 57                         | 2.80                  | 4.9              | 3.12De                      | D10                        | —   | 18.3                        | 90                  | 47                                   |
| 24                        | A Calif. Elec. Power ....     | 18                         | .80                   | 4.4              | *1.01Je                     | D6                         | 1   | *17.8                       | 79                  | 28                                   |
| 23                        | O Calif. Oreg. Power ....     | 33                         | 1.60                  | 4.8              | 1.91F                       | D16                        | 2   | 17.3                        | 84                  | 35                                   |
| 8                         | O Calif. Pac. Util. ....      | 32                         | 1.60                  | 5.0              | 2.33Au                      | 2                          | 3   | 13.7                        | 69                  | 30                                   |
| 67                        | S Carolina P. & L. ....       | 33                         | 1.32                  | 4.0              | 2.01Se                      | 12                         | 4   | 16.4                        | 66                  | 40                                   |
| 30                        | S Cent. Hudson G. & E. ....   | 18                         | .80                   | 4.4              | 1.18Je                      | 18                         | 6   | 15.3                        | 68                  | 31                                   |
| 23                        | O Cent. Ill. E. & G. ....     | 41                         | 1.60                  | 3.9              | 2.49Au                      | 5                          | 11  | 16.5                        | 64                  | 36                                   |
| 37                        | S Cent. Ill. Light ....       | 30                         | 1.40                  | 4.7              | 2.03Se                      | 5                          | 9   | 14.8                        | 69                  | 34                                   |
| 53                        | S Cent. Ill. P. S. ....       | 38                         | 1.68                  | 4.4              | 2.57Se                      | 8                          | 13  | 14.8                        | 65                  | 40                                   |
| 15                        | O Cent. Louisiana Elec. ....  | 45                         | 1.80                  | 4.0              | 2.24Je                      | 13                         | 8   | 20.1                        | 80                  | 30                                   |
| 38                        | O Cent. Maine Power ....      | 24                         | 1.40                  | 5.8              | *1.76Se                     | D5                         | 5   | *13.6                       | 80                  | 32                                   |
| 137                       | S Cent. & South West ....     | 53                         | 1.70                  | 3.2              | 2.50Se                      | 7                          | 10  | 21.2                        | 68                  | 40                                   |
| 12                        | O Cent. Vermont P. S. ....    | 19                         | 1.00                  | 5.3              | *1.22Au                     | 22                         | 2   | *15.6                       | 82                  | 33                                   |

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|         |      | (Continued)                 |     | 10/29/58 | Divi- |         | Recent | Aver.  |         | Price- | Div. | Approx. |
|---------|------|-----------------------------|-----|----------|-------|---------|--------|--------|---------|--------|------|---------|
| Annual  | Rev. |                             |     | Price    | dend  | Approx. | Share  | Incr.  | In Sh.  | Earn.  | Pay- | Common  |
| (Mill.) |      |                             |     | About    | Rate  | Yield   | Earns. | % In-  | earn.   | Ratio  | out  | Stock   |
|         |      |                             |     |          |       |         |        | crease | 1952-57 |        |      | Equity  |
| 121     | S    | Cincinnati G. & E. ....     | 34  | 1.50     | 4.4   | 2.02Je  | 4      | 9      | 16.8    | 74     | 39   |         |
| 7       | O    | Citizens Util. "B" .....    | 23  | 1.00     | 4.3   | 1.23Je  | 6      | 7      | 18.7    | 81     | 40   |         |
| 119     | S    | Cleve. Elec. Illum. ....    | 41  | 1.60     | 3.9   | 2.59Je  | 5      | 6      | 15.8    | 62     | 50   |         |
| 5       | O    | Colo. Cent. Power .....     | 36  | 1.32     | 3.7   | 1.94Se  | 17     | 4      | 18.6    | 68     | 41   |         |
| 44      | S    | Columbus & S. O. E. ....    | 35  | 1.60     | 4.6   | 2.12Au  | D17    | 5      | 16.5    | 75     | 30   |         |
| 380     | S    | Commonwealth Ed. ....       | 52  | 2.00h    | 5.8h  | 3.02Au  | 6      | 5      | 17.2    | 63     | 40   |         |
| 13      | A    | Community Pub. Service ..   | 31  | 1.30     | 4.2   | 1.98Se  | 3      | 6      | 15.7    | 66     | 45   |         |
| 75      | O    | Conn. Lt. & Pr. ....        | 23  | 1.10     | 4.8   | *1.36Se | 18     | 5      | *16.9   | 81     | 34   |         |
| 582     | S    | Consol. Edison .....        | 59  | 2.80     | 4.7   | *3.62Se | 10     | 6      | *16.3   | 77     | 38   |         |
| 221     | S    | Consumers Power .....       | 56  | 2.40     | 4.3   | 3.21Se  | —      | 5      | 17.4    | 75     | 37   |         |
| 78      | S    | Dayton P. & L. ....         | 52  | 2.40     | 4.6   | 3.38Je  | 7      | 2      | 15.4    | 71     | 38   |         |
| 49      | S    | Delaware P. & L. ....       | 55  | 2.00     | 3.6   | 2.81Je  | 3      | 12     | 19.6    | 71     | 30   |         |
| 251     | S    | Detroit Edison .....        | 40  | 2.00     | 5.0   | 2.34Se  | D10    | 11     | 17.1    | 85     | 44   |         |
| 136     | A    | Duke Power .....            | 48  | 1.60i    | 3.3   | 2.30Je  | 14     | 15     | 20.9    | 70     | 47   |         |
| 99      | S    | Duquesne Light .....        | 42  | 2.00     | 4.7   | 2.66Je  | 10     | 4      | 15.8    | 75     | 34   |         |
| 32      | O    | East Util. Assoc. ....      | 38  | 2.20     | 5.8   | 2.66Au  | 14     | 0      | 14.3    | 83     | 34   |         |
| 2       | O    | Edison Sault Elec. ....     | 17  | .80      | 4.7   | 1.17Je  | 4      | 24     | 14.5    | 68     | 33   |         |
| 14      | O    | El Paso Elec. ....          | 27  | 1.00     | 3.7   | 1.50Jy  | 8      | 9      | 18.0    | 67     | 36   |         |
| 12      | S    | Empire Dist. Elec. ....     | 22  | 1.20     | 5.5   | 1.52Se  | D2     | 3      | 14.5    | 79     | 32   |         |
| 52      | S    | Florida Power Corp. ....    | 84  | 2.00     | 2.4   | 3.67Se  | 37     | 13     | 22.8    | 55     | 34   |         |
| 131     | S    | Florida P. & L. ....        | 79  | 1.52     | 1.9   | 3.45Se  | 16     | 22     | 22.9    | 44     | 39   |         |
| 202     | S    | General Pub. Util. ....     | 44  | 2.12     | 4.8   | *3.32Se | 10     | 9      | *13.3   | 64     | 41   |         |
| 7       | O    | Green Mt. Power .....       | 18  | 1.00     | 5.6   | 1.28Je  | 13     | 7      | 14.1    | 78     | 36   |         |
| 62      | S    | Gulf States Util. ....      | 50  | 1.80     | 3.6   | 2.34Se  | 1      | 11     | 21.4    | 77     | 31   |         |
| 49      | A    | Hartford E. L. ....         | 60  | 3.00     | 5.0   | *4.26Au | NC     | 10     | *14.1   | 70     | 39   |         |
| 24      | O    | Hawaiian Elec. ....         | 50  | 2.50     | 5.0   | 2.93Au  | D21    | 12     | 16.9    | 85     | 37   |         |
| 87      | S    | Houston L. & P. ....        | 66  | 1.60     | 2.4   | 2.96Se  | 10     | 11     | 22.3    | 54     | 42   |         |
| 28      | S    | Idaho Power .....           | 45  | 1.60     | 3.6   | 2.40Jy  | NC     | 12     | 18.8    | 67     | 36   |         |
| 87      | S    | Illinois Power .....        | 34  | 1.50     | 4.1   | 2.03Au  | 9      | 7      | 16.7    | 74     | 34   |         |
| 46      | S    | Indianapolis P. & L. ....   | 34  | 1.50     | 4.1   | 2.12Se  | 3      | 7      | 16.0    | 70     | 35   |         |
| 26      | S    | Interstate Power .....      | 17½ | .85      | 4.9   | 1.10Je  | 33     | 2      | 15.8    | 77     | 31   |         |
| 36      | S    | Iowa Elec. L. & P. ....     | 33  | 1.60     | 4.8   | 2.09Se  | 4      | 5      | 15.8    | 77     | 38   |         |
| 41      | S    | Iowa-Ill. G. & E. ....      | 37  | 1.80c    | 4.9   | 2.52Je  | —      | 3      | 15.4    | 71     | 38   |         |
| 39      | S    | Iowa Power & Light ....     | 32  | 1.60     | 5.0   | 1.99Je  | D4     | 4      | 16.1    | 80     | 30   |         |
| 34      | O    | Iowa Pub. Serv. ....        | 17  | .80      | 4.7   | 1.13Se  | 4      | 8      | 15.0    | 71     | 35   |         |
| 14      | O    | Iowa South. Util. ....      | 27  | 1.28     | 4.7   | 1.97Se  | 10     | 5      | 13.7    | 65     | 40   |         |
| 61      | S    | Kansas City P. & L. ....    | 48  | 2.00     | 4.2   | 3.05Se  | 4      | 7      | 15.7    | 66     | 37   |         |
| 32      | S    | Kansas G. & E. ....         | 36  | 1.40     | 3.9   | 2.44Se  | 4      | 13     | 14.8    | 57     | 30   |         |
| 48      | S    | Kansas Pr. & Lt. ....       | 27  | 1.30     | 4.8   | 2.00Se  | D4     | 7      | 13.5    | 65     | 31   |         |
| 39      | O    | Kentucky Util. ....         | 31  | 1.40     | 4.5   | 2.21Je  | 6      | 3      | 14.0    | 68     | 36   |         |
| 7       | O    | Lake Superior D. P. ....    | 24  | 1.20     | 5.0   | 1.61Je  | —      | 3      | 14.9    | 75     | 39   |         |
| 110     | S    | Long Island Lighting ....   | 29  | 1.20     | 4.1   | 1.60Je  | 12     | 5      | 18.1    | 75     | 34   |         |
| 56      | S    | Louisville G. & E. ....     | 37  | 1.20     | 3.2   | 2.17Je  | 30     | 3      | 17.1    | 58     | 41   |         |
| 10      | O    | Madison G. & E. ....        | 49  | 1.80     | 3.7   | 3.46Se  | D19    | 11     | 14.2    | 52     | 44   |         |
| 5       | A    | Maine Pub. Service ....     | 20  | 1.16     | 5.8   | 1.43Au  | D6     | 7      | 14.0    | 81     | 37   |         |
| 6       | O    | Michigan G. & E. ....       | 60  | 1.60     | 2.7   | 4.48Je  | 11     | 8      | 13.4    | 36     | 40   |         |
| 172     | S    | Middle South Util. ....     | 45  | 1.80     | 4.0   | 2.59Se  | 3      | 6      | 17.4    | 70     | 35   |         |
| 30      | S    | Minnesota P. & L. ....      | 32  | 1.60     | 5.0   | 2.33Se  | D8     | 11     | 13.7    | 69     | 33   |         |
| 3       | O    | Miss. Valley P. S. ....     | 28  | 1.40     | 5.0   | 2.09Se  | D3     | 3      | 13.4    | 67     | 32   |         |
| 13      | S    | Missouri Pub. Serv. ....    | 17  | .72f     | 4.2   | .98Se   | 1      | 9      | 17.3    | 73     | 29   |         |
| 7       | O    | Missouri Util. ....         | 26  | 1.36     | 5.2   | 1.68Je  | D10    | 3      | 15.5    | 81     | 33   |         |
| 44      | S    | Montana Power .....         | 63  | 2.00     | 3.1   | *3.81Je | 3      | 8      | *16.5   | 53     | 39   |         |
| 159     | S    | New England Elec. ....      | 18  | 1.00     | 5.6   | 1.17Je  | —      | 0      | 15.4    | 85     | 34   |         |
| 46      | O    | New England G. & E. ....    | 19  | 1.00     | 5.3   | 1.53Se  | 5      | 5      | 12.4    | 65     | 41   |         |
| 49      | O    | New Orleans P. S. ....      | 48  | 2.25     | 4.7   | 3.22Au  | 16     | 0      | 14.7    | 70     | 39   |         |
| 3       | O    | Newport Electric ....       | 20  | 1.10     | 5.5   | 1.38Se  | 28     | —      | 14.5    | 80     | 31   |         |
| 89      | S    | N. Y. State E. & G. ....    | 49  | 2.00     | 4.1   | *3.68Se | 21     | 6      | *13.3   | 54     | 37   |         |
| 255     | S    | Niagara Mohawk Power ..     | 37  | 1.80     | 4.9   | *2.09Je | 10     | —      | *17.7   | 86     | 28   |         |
| 87      | O    | Northern Ind. P. S. ....    | 43  | 2.00     | 4.7   | 2.76Se  | D7     | 6      | 15.6    | 72     | 37   |         |
| 148     | S    | Nor. States Power .....     | 21  | 1.00     | 4.8   | 1.29Se  | 7      | 4      | 16.3    | 77     | 33   |         |
| 10      | O    | Northwestern P. S. ....     | 20  | 1.00     | 5.0   | 1.59Je  | 22     | 0      | 12.6    | 63     | 27   |         |
| 136     | S    | Ohio Edison .....           | 56  | 2.64     | 4.7   | 3.57Se  | D1     | 5      | 15.7    | 74     | 41   |         |
| 50      | S    | Oklahoma G. & E. ....       | 56  | 1.90     | 3.4   | 2.86Se  | 15     | 5      | 19.6    | 66     | 30   |         |
| 21      | O    | Orange & Rockland Utils. .. | 21  | .90      | 4.3   | *1.12Ma | NC     | 15     | *18.8   | 80     | 26   |         |
| 16      | O    | Otter Tail Power .....      | 33  | 1.60     | 4.8   | 2.22Au  | 1      | 1      | 14.9    | 72     | 29   |         |

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| Annual<br>Rev.<br>(Mill.) | (Continued)                | 10/29/58<br>Price<br>About | Divi-<br>dend<br>Rate | Approx.<br>Yield | Recent<br>Share<br>Earnings | % In-<br>crease | Aver.<br>Incr.<br>In Sh.<br>Earnings<br>1952-57 | Price-<br>Earnings<br>Ratio | Div.<br>Pay-<br>out | Approx.<br>Common<br>Stock<br>Equity |
|---------------------------|----------------------------|----------------------------|-----------------------|------------------|-----------------------------|-----------------|---|-----------------------------|---------------------|--------------------------------------|
| 501 S                     | Pacific G. & E. ....       | 56                         | 2.40                  | 4.3              | 3.67Je                      | 11              | 10  | 15.3                        | 65                  | 34                                   |
| 50 O                      | Pacific P. & L. ....       | 37                         | 1.60                  | 4.3              | *2.37Jy                     | 10              | 5   | *15.6                       | 68                  | 28                                   |
| 129 S                     | Penn Power & Lt. ....      | 49                         | 2.40                  | 4.9              | 3.12Au                      | D6              | 9   | 15.7                        | 77                  | 30                                   |
| 236 S                     | Phila. Elec. ....          | 44                         | 2.00                  | 4.5              | *2.76Se                     | 10              | 4   | *15.9                       | 72                  | 39                                   |
| 36 O                      | Portland Gen. Elec. ....   | 25                         | 1.20                  | 4.8              | 1.67Au                      | —               | 8   | 15.0                        | 72                  | 37                                   |
| 69 S                      | Potomac Elec. Pr. ....     | 25                         | 1.20                  | 4.8              | *1.52Je                     | D5              | 3   | *16.4                       | 79                  | 32                                   |
| 91 S                      | Pub. Serv. of Colo. ....   | 49                         | 1.80                  | 3.7              | 2.54Je                      | D4              | 7   | 19.3                        | 71                  | 36                                   |
| 322 S                     | Pub. Serv. E. & G. ....    | 35                         | 1.80                  | 5.1              | 2.23Se                      | 5               | 3   | 15.7                        | 82                  | 34                                   |
| 79 S                      | Pub. Serv. of Ind. ....    | 41                         | 2.10                  | 5.1              | 2.81Se                      | 6               | 3   | 14.6                        | 75                  | 38                                   |
| 32 O                      | Pub. Serv. of N. H. ....   | 18                         | 1.00                  | 5.6              | 1.25Se                      | D17             | 6   | 14.4                        | 80                  | 36                                   |
| 13 O                      | Pub. Serv. of N. M. ....   | 23                         | .80g                  | 3.5              | 1.23Je                      | 10              | 8   | 18.7                        | 65                  | 35                                   |
| 27 S                      | Puget Sound P. & L. ....   | 31                         | 1.44                  | 4.6              | *1.89Je                     | 8               | 16  | *16.4                       | 76                  | 50                                   |
| 60 S                      | Rochester G. & E. ....     | 38                         | 1.60                  | 4.2              | 2.45Se                      | 10              | 2   | 15.5                        | 65                  | 32                                   |
| 8 S                       | St. Joseph L. & P. ....    | 29                         | 1.50                  | 5.2              | 1.90Se                      | D6              | 8   | 15.3                        | 80                  | 32                                   |
| 54 S                      | San Diego G. & E. ....     | 27                         | .95                   | 3.5              | 1.30Au                      | D7              | D   | 20.7                        | 74                  | 36                                   |
| 10 O                      | Savannah E. P. ....        | 27                         | 1.00                  | 3.7              | 1.58Au                      | 28              | 25  | 17.1                        | 63                  | 30                                   |
| 10 O                      | Sierra Pacific Pr. ....    | 30                         | 1.40                  | 4.7              | 1.93Au                      | D4              | 12  | 15.5                        | 73                  | 30                                   |
| 217 S                     | So. Calif. Edison ....     | 56                         | 2.40                  | 4.3              | 3.51Se                      | 14              | D   | 16.0                        | 68                  | 33                                   |
| 46 S                      | So. Carolina E. & G. ....  | 32                         | 1.20                  | 3.8              | 1.83Au                      | 25              | 15  | 17.5                        | 66                  | 35                                   |
| 7 O                       | Southern Colo. Pr. ....    | 17                         | .90                   | 5.3              | 1.48Au                      | 13              | 8   | 11.4                        | 61                  | 38                                   |
| 255 S                     | Southern Company ....      | 33                         | 1.20                  | 3.6              | 1.78Se                      | 13              | 8   | 18.5                        | 67                  | 32                                   |
| 19 S                      | So. Indiana G. & E. ....   | 33                         | 1.60                  | 4.8              | 2.44Se                      | 7               | 2   | 13.5                        | 65                  | 37                                   |
| 7 O                       | So. Nevada Power ....      | 23                         | 1.00                  | 4.3              | 1.37Au                      | D13             | 9   | 16.8                        | 73                  | 40                                   |
| 1 O                       | Southern Utah Power ....   | 19                         | 1.00                  | 5.3              | 1.36Ap                      | D12             | 0   | 14.0                        | 73                  | 39                                   |
| 3 O                       | Southwestern E. S. ....    | 30                         | 1.24                  | 4.1              | 1.74Au                      | D6              | 3   | 17.2                        | 71                  | 28                                   |
| 42 S                      | Southwestern P. S. ....    | 37                         | 1.48                  | 4.0              | 1.73Jy                      | D2              | 5   | 21.5                        | 86                  | 35                                   |
| 30 A                      | Tampa Electric ....        | 42                         | 1.20                  | 2.9              | 1.64Se                      | D1              | 11  | 25.6                        | 73                  | 35                                   |
| 155 S                     | Texas Utilities ....       | 59                         | 1.60                  | 2.7              | 2.67Au                      | 6               | 13  | 22.1                        | 60                  | 40                                   |
| 42 S                      | Toledo Edison ....         | 15                         | .70                   | 4.7              | 1.03Je                      | 2               | —   | 14.6                        | 68                  | 31                                   |
| 16 O                      | Tucson G. E. L. & P. ....  | 45                         | 1.52                  | 3.4              | 2.44Je**                    | 14              | 15  | 18.4                        | 62                  | 35                                   |
| 129 S                     | Union Elec. of Mo. ....    | 31                         | 1.52                  | 4.9              | 1.85Se                      | —               | 7   | 18.8                        | 92                  | 32                                   |
| 36 O                      | United Illuminating ....   | 27                         | 1.30                  | 4.8              | 1.61Au                      | 6               | 2   | 16.8                        | 81                  | 48                                   |
| 6 O                       | Upper Peninsula Pr. ....   | 30                         | 1.60                  | 5.3              | 1.53Je                      | D26             | 8   | 19.6                        | 105                 | 31                                   |
| 43 S                      | Utah Power & Light ....    | 30                         | 1.20                  | 4.1              | 1.76Au                      | D4              | 8   | 17.0                        | 68                  | 42                                   |
| 130 S                     | Virginia E. & P. ....      | 35                         | 1.00                  | 2.9              | 1.63Se                      | 11              | 15  | 21.5                        | 61                  | 37                                   |
| 31 S                      | Wash. Water Pr. ....       | 41                         | 2.00                  | 4.9              | *2.26Se                     | D8              | 9   | *18.1                       | 88                  | 36                                   |
| 140 S                     | West Penn Elec. ....       | 32                         | 1.50                  | 4.7              | 2.22Au                      | 2               | 6   | 14.4                        | 68                  | 32                                   |
| 77 O                      | West Penn Power ....       | 51                         | 2.40                  | 4.7              | 3.25Au                      | NC              | 6   | 15.7                        | 74                  | 36                                   |
| 12 O                      | Western Lt. & Tel. ....    | 38                         | 2.00                  | 5.3              | 2.79Je                      | D5              | 7   | 13.6                        | 72                  | 38                                   |
| 28 O                      | Western Mass. Cos. ....    | 45                         | 2.20                  | 4.9              | 3.31Se                      | 4               | 8   | 13.6                        | 66                  | 49                                   |
| 114 S                     | Wisc. Elec. Pr. (Cons.) .. | 35                         | 1.60                  | 4.6              | 2.21Je                      | D9              | 0   | 15.8                        | 72                  | 36                                   |
| 43 O                      | Wisconsin P. & L. ....     | 29                         | 1.36                  | 4.7              | 1.97Se                      | —               | 4   | 14.7                        | 69                  | 40                                   |
| 40 S                      | Wisconsin P. S. ....       | 24                         | 1.20                  | 5.0              | 1.70Jy                      | D8              | 5   | 14.1                        | 70                  | 38                                   |
| Averages .....            |                            |                            |                       | 4.6%             |                             | 4%              | 7%  | 16.3                        | 72%                 |                                      |
| Foreign Companies         |                            |                            |                       |                  |                             |                 |   |                             |                     |                                      |
| 215 S                     | Amer. & Foreign Pr. ....   | 18                         | 1.00                  | 5.6              | 2.16Je                      | 27              | 0   | 8.3                         | 46                  | 44                                   |
| 170 A                     | Brazilian Traction ....    | 7                          | .53a                  | 7.6              | 1.52De                      | D30             | 0   | 4.6                         | 35                  | 75                                   |
| 75 A                      | British Col. Pr. ....      | 41                         | 1.40                  | 3.4              | 2.33De                      | —               | 15  | 17.6                        | 60                  | 28                                   |
| 18 A                      | Gatineau Power ....        | 39                         | 1.50                  | 3.8              | 2.39De                      | 5               | 10  | 16.3                        | 63                  | 33                                   |
| 42 O                      | Mexican L. & P. ....       | 13                         | 1.00b                 | 7.7              | 1.96De                      | 17              | 24  | 6.6                         | 51                  | 46                                   |
| 14 A                      | Quebec Power ....          | 36                         | 1.40                  | 3.9              | 2.17De                      | 8               | 14  | 16.6                        | 65                  | 53                                   |
| 63 A                      | Shawinigan Water & Power   | 31                         | .68                   | 2.2              | 1.48De                      | 5               | 26  | 20.9                        | 46                  | 37                                   |

\*Deferred taxes resulting from liberalized depreciation are not normalized. If they had been normalized the price-earnings ratio would be higher. \*\*On average shares. D—Decrease. NC—Not comparable. A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Jy—July; Au—August; Se—September; Oc—October; N—November; De—December. a—Also 5 per cent stock dividend December 27, 1957. b—Also 5 per cent stock dividend May 1, 1958. c—Also 5 per cent stock dividend March 10, 1958. f—Also stock dividend of one-half per cent quarterly. g—Also 5 per cent stock dividend July 1, 1958. h—Also 2 per cent stock dividend November 20, 1958, included in the yield. i—Also 15 per cent stock dividend.



## What Others Think

### Financing of Utility Securities

THE fact that there is today a ready acceptance of the securities of the utility industry should not make utility management complacent. This was the gist of the opening remarks of Harry W. Witt of Kidder, Peabody & Co. in a speech to the Maryland Utilities Association on September 13, 1958.

Witt said that utility securities are acceptable, first of all, because of the intrinsic characteristics of the industry. But good management and a favorable regulatory climate are two of the most important factors that attract investors. Yet, we must examine the needs and objectives of the majority of investors in order to get a clear picture of why consumers buy utility securities so readily. Actually, investors look for the same general characteristics when they appraise utilities as they do in selecting any other investment. They seek safety of principal, reasonable return, and good long-term prospects. In general, Witt declared, utilities give greater protection of principal and less chance for appreciation than many industrial.

In regard to the bond buyer, Witt said that he is primarily interested in the long-term outlook. Preferred stock buyers are somewhat more interested in yield; others who buy this type of stock are, of course,

attracted by the 85 per cent tax-exemption-on-corporate-dividends feature.

Witt then took up the situation of the common stock buyers, who, he said, are divided into three general categories. The first type of stock buyer is the high-tax-bracket individual who is not interested in current yield but rather is seeking capital appreciation—that is, growth and earnings per share. In the second category are groups and individuals for whom reasonable dividends, along with some growth in earnings and dividends, are the desirable features. He pointed out that this group is the largest source of capital for corporations selling common stocks, including mutual funds and pension funds, as well as trusts managed by institutions and a large number of individuals.

There is a third group, too, he said, which seeks current high income. This group is not too large, because such a financial objective usually can be more easily obtained by investing in bonds or preferred stocks.

OBSERVING that the greatest acceptance of utility securities can be attained by satisfying the requirements and objectives of the largest number of investors possessing the largest portion of available capital, Witt said:

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... Under present conditions and for the visible future, maximum investor acceptance of utility securities can best be attained by attracting the large group of investors who look for reasonable return combined with prospects for enhancement in value. This means emphasis on growth in earnings per share of common with proportionate increments in dividends while maintaining fairly consistent and reasonable capitalization ratios. Such a policy is most apt to open the doors to the largest amount of investor capital, both bonds and stock. The degree of success in attaining such a record will determine the degree of ready acceptance of the securities of a given utility.

These results, Witt insisted, could be attained by most electric, natural gas distribution, and telephone companies by application of appropriate management action combined with fair and businesslike regulation. The essential element, in addition to growth of a business, is the establishment and maintenance of an adequate rate of return. Once such a return is established, earnings per share of an expanding utility will grow without any further increase in the rate of return, assuming stable cost of senior capital and continuance of existing capitalization ratios. This is true, even assuming for purposes of simplicity that all earnings are put out in dividends.

**W**ITT declared that with an adequate rate of return, earnings per share will grow over and above the growth which results from retaining a portion of earnings and reinvesting such retained earnings in the business. Earnings not paid out to the common stockholder in dividends belong to him as part of total earnings-return needed to attract him as an investor.

**I**N order to illustrate what Witt means by growth in earnings per share resulting from an adequate rate of return, he prepared the charts on page 903 which assume three utility systems, each identical as to business, capitalization, and rate of growth. System A has a rate of return on its capital or rate base, which is sufficient to bring down to its common stock earnings per share which justify and support market prices for its common stock at **levels only approximating its book value** per share. System B has a lower rate of return with earnings per share justifying market prices at only about one-half its book value. System C is earning a rate of return such that earnings per share normally support a market price twice its book value.

Explaining these charts, Witt stated as follows:

Assuming that each of these systems double their plant investment and maintain their present capitalization ratios and rate of return with cost of senior capital equal to that now paid, it will be necessary in each case to double the amount of capital, bonds, preferred stock, and common stock equity. The total amount of earnings applicable to each class of security will also double.

In the case of System A whose common stock sells at about the book value, it will be necessary to double the number of shares of common in order to double the book value of common equity. With twice the earnings available and twice the number of common shares outstanding, earnings per share on the expanded system will be unchanged despite the risk attendant upon growth, a profitless prosperity.

In the case of System B whose common is selling at one-half its book value, it will be necessary to sell two additional shares for each share now out-



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standing in order to double the book value of common stock equity. Thus, with earnings only doubled but with the number of common shares tripled, earnings per share on the expanded system will be only two-thirds of what they were before. This constitutes dilution, reducing the value of each of the original shares to two-thirds of what they were worth before the expansion, thus permanently injuring such shareholders.

In the case of System C whose com-

mon is selling at twice the book value, it is necessary to sell only one-half as many shares as now outstanding in order to double the book value of the common stock equity. Thus, with earnings available for the common doubled, and the number of common shares increased by only 50 per cent, earnings per share increase by one-third or by 33⅓ per cent. This represents true growth in earnings per share, resulting from an adequate rate of return which has habitually justified and sup-

### GROWTH IN EARNINGS PER SHARE WITHOUT INCREASING RATE OF RETURN

Earnings per share of a growing utility system can remain unchanged, decrease, or increase, depending upon the adequacy of its existing rate of earnings return, as indicated below:

|  | Utility System:             |                      |                       |
|--|-----------------------------|----------------------|-----------------------|
|  | A<br>Inadequate<br>Earnings | B<br>Low<br>Earnings | C<br>Fair<br>Earnings |
| <i>Assuming:</i>   |                             |                      |                       |
| Total earnings available for common .....  | \$ 1,000,000                | \$ 500,000           | \$ 2,000,000          |
| Total number of common shares .....  | 1,000,000                   | 1,000,000            | 1,000,000             |
| Earnings per share common .....  | \$1.00                      | \$.50                | \$2.00                |
| Market price of common—per share (assuming 15 times earnings) .....  | \$15                        | \$7.50               | \$30                  |
| Total market value of common (based on 1,000,000 shares) .....   | \$15,000,000                | \$ 7,500,000         | \$30,000,000          |
| Total book value of common .....   | \$15,000,000                | \$15,000,000         | \$15,000,000          |
| Book value per share of common .....   | \$15                        | \$15                 | \$15                  |
| <i>Assuming above Systems Doubled in Total Capitalization and Earnings*:</i>   |                             |                      |                       |
| Total earnings available for common .....  | \$ 2,000,000                | \$ 1,000,000         | \$ 4,000,000          |
| Number of shares of common:  |                             |                      |                       |
| Previously outstanding shares .....  | 1,000,000                   | 1,000,000            | 1,000,000             |
| Additional shares required to double book value of common (i.e., to raise \$15,000,000) (New shares sold at mkt. pr.) Book value/market price .. | \$15/\$15                   | \$15/\$7.50          | \$15/\$30             |
| Number of new shares needed for each old share   | 1                           | 2                    | 1                     |
| Number of additional shares .....  | 1,000,000                   | 2,000,000            | 500,000               |
| Total shares to be outstanding .....   | 2,000,000                   | 3,000,000            | 1,500,000             |
| Earnings per share .....   | \$1.00                      | \$.33⅓               | \$2.66⅔               |
| Per cent gain (loss) in earnings per share .....   | —                           | (33⅓%)               | 33⅓%                  |
| Market price of common—per share (assuming 15 times earnings) .....  | \$15                        | \$ 5                 | \$40                  |
| Total market value of common (based on new number of shares) .....   | \$30,000,000                | \$15,000,000         | \$60,000,000          |
| Total book value of common .....   | \$30,000,000                | \$30,000,000         | \$30,000,000          |
| Book value per share of common .....   | \$15                        | \$10                 | \$20                  |
| Per cent gain (loss) in book value per share ....  | —                           | (33⅓%)               | 33⅓%                  |

\*Assuming same rate of earnings return, same cost of senior capital, and same capitalization ratios on expanded system as those on original system. The earnings return differs from one system to another as indicated above, but in each case rate of return on the expanded system remains the same as on the system before expansion.

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ported market prices for the common at levels well above book value. This growth in earnings per share is accomplished without increased rate of return and without reducing the common stock equity ratio, and is growth which is over and above growth in earnings per share resulting from the normal process of paying out in dividends only a portion of earnings available to the common.

**T**HUS, Witt said, in order to attain true growth in earnings per share from the viewpoint of the investor, the utility must secure and maintain a rate of return which is sufficient to justify and support market prices for its common stock well above its book value per share.

Witt continued his analytical comparison as follows:

A recent study of 116 electric utilities whose common stocks are actively traded showed that the premium of market price over book value per share averaged approximately 79 per cent as of July 24, 1958. Gross corporate income in per cent of total capitalization for this entire group averaged about 6 per cent. The ten companies with the highest premiums of market price over book value showed an average premium of 174 per cent and an average rate earned on total capitalization of 7.1 per cent. The ten companies with the lowest premiums of market price over book value showed an average premium of only 26 per cent and an average rate earned on capitalization of only 5.3 per cent. A study of the increases in earnings per share over the past ten-year period, adjusted for stock dividends, etc., showed that the group of ten utilities with high premiums of market price over book value averaged a gain of about 132 per cent in earnings per

share, while the group with low premiums of market over book value averaged a gain of only 13 per cent in earnings per share.

**W**ITT said that the essential elements required, from the viewpoint of the company, in attaining maximum investor acceptance of its securities are appropriate financial policy, adequate return, and maximum business growth. He added:

Important elements in financial policy are equity and other capitalization ratios and the proportion of common stock earnings paid out in dividends. The utility's attitude toward common stock equity ratio is a most important element in its financial policy. The establishment and maintenance of a common equity ratio substantially higher than existing ratios can be accomplished only at the expense of earnings per share unless the utility obtains compensating increases in its overall rate of return. Once a utility has reached what it considers to be a reasonable common equity ratio, therefore, it can encourage investor confidence by making generally known its policy in this respect. The equity ratio to be achieved must necessarily be a management decision, but for purposes of indicating a rough measure, we have found general investor acceptance in a range of approximately 30 per cent to 40 per cent for electric utilities and a somewhat higher ratio for natural gas distribution and telephone companies.

**O**NCE the common equity ratio is established at a level deemed satisfactory by management, and it then wishes to improve its investment position and service ratings of its mortgage bonds, it can do so by adding to the preferred stock. Preferred stock is a most useful instru-

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"DON'T FORGET YOUR TRANSIT TICKETS"

ment in making possible a reasonably low debt ratio and high credit rating without diluting the common stock. Moreover, Witt said, the cost of preferred stock capital is considerably lower than that for common stock.

**I**T was conceded that preferred stock is often difficult to sell and that consequently the company should watch the market for signs of strength in the preferred stock market which occurs periodically. The ratio could be raised substantially, according to Witt, to the benefit of both common stock and debt holders

by taking advantage of such occasional favorable periods in the preferred stock market. For preferred stock, per cent of total capitalization, he said, averages about 15 per cent for electric utilities and somewhat less for natural gas and telephone companies. Preferred stock is a form of capital which has distinct advantages to utilities and should be utilized wherever the existing preferred ratio is low.

Speaking of dividend pay-out, this ratio tends to be geared generally to the utility's growth with low pay-outs accompanying high rates of growth, and con-

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versely. However, there are many exceptions.

WITT maintained that the attainment of an adequate rate of return in an economy where inflationary tendencies persist is one of the biggest problems of both management and the regulatory commissions. Another factor complicating attaining these objectives is the rising tendency of interest rates since the government ceased its arbitrary support of government bonds as of March 4, 1951. Since then, interest rates have tended to seek their natural level. Their upward trend has been interrupted only by two periods of recession, one in 1953 and the other in 1957. During 1954 through 1956, demand for capital from industrials, utilities, municipalities, real estate, and other sources outstripped the available supply of savings. "A"-rated utility bonds reached levels yielding over 5 per cent.

Witt said that he believes that, with business taking an upward path from present depressed levels to more normal conditions, there will be a resumption in demand for new capital. This, he maintained, should tend toward higher interest rates compared with those now prevailing.

He said government financing of the huge federal deficit is another influencing factor. While the Federal Reserve System ordinarily would take steps to help such government financing, its efforts recently have been to tighten money, which is designed to discourage undue amounts flowing into the stock market and to deter inflationary tendencies in general.

It was admitted that regulation throughout most of the states in recent years has been as a rule constructive. The

result has been that despite increases in operating costs resulting from general inflation, utilities have still been able to raise large amounts of new capital to meet increased customer demands at reasonable cost to the company and its customers.

After World War II state commissions generally were slow in recognizing the effect of inflation on rising costs.

ONE of the chief factors in the choice of utility securities by investors is, of course, the regulatory climate within the state. Some states are systematically avoided by utility investors because of the commission's attitude on regulation. Investors are always vitally interested in such questions as whether a commission allows, for rate-making purposes, a charge which includes the amount of tax deferral resulting from accelerated depreciation. Congress passed a law allowing accelerated depreciation for income tax purposes in order to help raise capital and do so at low cost. Such a process benefits the customer in due time. Where the commission forces the utility to pass along all of the benefits in the form of tax savings to the customer immediately, there are no benefits left for the company, "and the intent of this legislation is destroyed."

One other element considered by investors, in appraising utilities, is *depth of management*. They want to know whether the company has a reserve of executives capable of filling key posts.

Witt concluded his remarks by saying he believed that utilities may be financed at lowest cost by keeping their common stocks dynamic. He said that with appropriate management action and reasonable regulation, it is possible to do so.

## WHAT OTHERS THINK

### AGA Convention Stresses Unity

**R**OBERT W. OTTO, retiring president of the American Gas Association, opened the association's fortieth annual convention in Atlantic City last month with a strong plea that the leaders of all segments of the gas industry join together in developing a program of unified action for the industry.

Real unified action "is absolutely essential," said Otto, "to a continued high level of progress in the gas industry."

Otto, who is chairman of the board of Laclede Gas Company, said "the entire industry must speak up in one voice if we are to meet the very real and very big problem—the problem of achieving the legislative atmosphere we need and which we do not have today because of congressional inaction on a new natural gas bill and because of the chaos created by the Memphis decision now awaiting review by the Supreme Court—and the problem, too, of getting the kinds of gas appliances manufactured by the kinds of companies which will insure the continuing use of gas to its greatest potential and greatest advantage."

The gas industry must get over three hurdles, Otto declared. He listed them as the increasing cost of natural gas and related questions of appropriate governmental price regulation, increasingly acute competition, and achieving effective unity and common purpose at all levels of the industry. Discussing natural gas production and reserves, he said "the fundamental long-term interest of the entire industry depends on the defining and the acceptance of a national policy that will encourage and stimulate ever more intense efforts to add to the proved gas reserves of the nation.

"It is essential that all of us in the transporting and distributing branches of

the industry stand side by side with the producers to help build the kind of public and governmental understanding that will result in maximum encouragement to the exploring and producing elements of our industry. It is not just in the interest of our industry—it is the public interest that demands this.

"Any extension of federal regulatory jurisdiction over the prices producers may set for gas at the wellhead will, if not altered, limit in a most drastic way the growth potential of our industry and the opportunity of the public to enjoy the benefits of natural gas," Otto warned.

**T**HE gas industry, in its efforts to win public understanding and support, must recognize that the tide of public sentiment is running against it, Joseph C. Bevis, president of Opinion Research Corporation of Princeton, New Jersey, told the AGA convention. Business has lost favor with the public partly because of misconceptions or myths in the public's mind, he said. Studies of public thinking are replete with examples of lack of knowledge of the facts about the American business system.

Bevis said analysis by education shows that those who have the least education tend to be the most socialistic. But the more education a person has the better he understands our economic system and the more likely he is to support the free enterprise philosophy. As for the natural gas industry, Bevis said lack of information on the part of the public is widespread. As an example, he noted that in 1955, majorities of thought leaders (editors, radio and TV commentators, businessmen, teachers, etc.) did not know that natural gas prices are regulated. Even eight out of ten gas company stockholders in two



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surveys made by Opinion Research Corporation were unable to estimate within 25 cents their company's earnings per share a few weeks after receiving and reading their annual report.

The electric light and power industry was cited by Bevis as a good example of what can be done to influence public opinion. He said that in 1943, when Opinion Research made its first nation-wide survey for the electric industry, a majority of people favored government ownership and only 41 per cent favored business ownership. Nation-wide surveys have been made every other year since then by Opinion Research as a check on how the industry stands and to furnish guidance for its public information efforts. Today, said Bevis, the situation is completely reversed, with 56 per cent now favoring business ownership and only 37 per cent government ownership. AGA and the Independent Natural Gas Association are jointly sponsoring a nation-wide survey by Opinion Research which will, for the first time, write a blueprint of the standing of the gas industry with the public.

**P**UBLIC acceptance of the "something for nothing" myth concerning government utility ownership and service is a step toward a socialistic "point of no return," J. W. McAfee, president of Union Electric Company and former president of the Edison Electric Institute, told the convention. Said McAfee:

The lure of the appearance of "something for nothing" is probably the strongest factor in the amount of public support given to the great variety of proposals that have socialistic features.

McAfee warned that gas and electric utilities are particularly vulnerable to the "something for nothing" approach. "Any-

thing can be made to appear cheap if part of the cost is concealed," he said. "To require the customer of the private gas or electric utility to pay taxes and the cost of money, and to free the customer getting service from a government operation from these payments, is almost a bribe for support of socialization."

Union Electric's president observed that there was little talk of socializing the gas industry until private enterprise had assumed all the risks and done the work of developing gas utility service throughout the country. "It is only now, after all that accomplishment, that the big government adherent—prodded on by the true Socialist and Communist—finally becomes zealous to take over," he declared. McAfee charged that the proponents of government in business "wrap their contentions in all sorts of appealing phrases and slogans. They sound good superficially," he said, "but when carefully examined, they have little if any meaning."

Citing the use of the term "public ownership," McAfee said, "The public owns everything in this country, including the government. Almost the sole difference between investor ownership and government ownership is one of freedom of choice to the individual." Under investor ownership, he explained, the citizen has a free choice as to becoming a gas utility owner. He may invest his savings in any of hundreds of gas companies, switch his investments to another company, or even sell out entirely. Under government ownership, the taxpayer automatically becomes a utility owner, regardless of his wishes or intentions. McAfee added that the "taxpayer-owner, as an individual, has no control over how long he continues to be an owner."

**"W**E again find ourselves facing almost chaotic conditions in the

## WHAT OTHERS THINK

gas-producing industry because of our inability to obtain legislation that will insure gas producers against utility-type regulation," Glenn W. Clark, president of the Independent Natural Gas Association of America, said in an address to the convention. "The continuing confusion and frustration that exist in the gas-producing segment of our industry at the same time that the cost of replacing produced gas is increasing rapidly is, in my opinion, the most serious situation faced today by the natural gas industry. Without the con-

tinuing discovery of huge new gas reserves which will be dedicated willingly to the interstate markets, the progress of the entire gas industry will be throttled," Clark said.

Clark, who is also president of Mississippi River Fuel Corporation, said he believes the pipeline companies, with their experience before the Federal Power Commission, can, in conjunction with gas producers, make a serious attempt to find at least a partial solution of these problems within the framework of the Gas Act.

### Correction on Memphis Case Discussion—in October 23, 1958, Issue, Page 698

THE editors regret that in describing the relative positions of parties to the recent argument of the celebrated Memphis case before the U. S. Supreme Court, the contention of the gas pipeline companies was, in one sentence, inadvertently confused with that of their opponents, the city of Memphis and others. It was there stated (page 698) that the "service agreements in issue (in the Memphis appeal) are in reality fixed-rate

contracts and therefore indistinguishable from those involved in the Mobile case and the Sierra case . . ." This passage should have read, to the contrary, that the Memphis case service agreements were *not* fixed-rate contracts and therefore *entirely distinguishable* from those involved in the Mobile and the Sierra cases. The balance of the paragraph correctly describes the actual argument of the pipeline companies.

### Notes on Recent Publications

**FEDERAL REGULATION OF NATURAL GAS IN THE UNITED STATES** by Edward Falck and Francis X. Welch, published by Edward Falck Co., 1625 I street, N. W., Washington 6, D. C. Price, \$2 per copy. This 100-page booklet is the joint production of a noted consultant, Edward Falck (wartime Director of the old WPB Office of War Utilities) and Francis X. Welch, editor of **PUBLIC UTILITIES FORTNIGHTLY**. Originally prepared as a simple and brief explanation of the background and current operation of federal regulation for the benefit of a Canadian investigating board, the lucidity of the approach was found to appeal to a broader audience. It should be especially helpful to laymen, as well as practitioners, seeking an introductory approach to the various complex problems which have arisen under the Natural Gas Act. The booklet explains briefly the salient provisions of the act and touches on the effect of some of the

more important decisions which have been handed down, so far, in carrying out that regulatory statute.

**LIMITED-ACCESS HIGHWAYS AND PUBLIC UTILITY USER**, by Robert P. Garbarino, Vol. 3 *Villanova Law Review* 489 (June, 1958).

The author, assistant counsel for the Philadelphia Electric Company, has made a survey of all state laws to determine if new state legislation is necessary to carry out expected federal regulation governing utility installations in the interstate highway system. He concludes, in this 26-page article, that new legislation will not be necessary provided the states utilize two alternatives already existing: (1) state regulation of utilities; (2) state acceptance of federal-aid conditions. The author prefers the latter method but doubts that access provisions of existing state legislation could be effectively utilized.



## The March of Events

### California

#### Public Utilities Commission Acts to Protect Public

**T**HE California PUC has taken unusual actions to protect the public against excessive charges for gas purchased from out-of-state sources. It asked the Federal Power Commission to reopen 17 certificate proceedings and require producers of natural gas to furnish cost and other data to test the reasonableness of the price to be charged El Paso Natural Gas Company.

In addition, the PUC asked the state legislature for \$58,630 per year to create a task force headed by one attorney and two engineers to devote full time to regulatory proceedings before federal agencies, principally the FPC.

C. Lyn Fox, the commission's president, emphasized that not only does California obtain three-fourths of its gas from out of state, but cost of the fuel is

more than half the operational expenses of gas utilities in the state which sell to the public. El Paso, which is the sole supplier of out-of-state gas to California companies, has been responsible for 14 rate increases since January 1, 1953, when it first started supplying California gas utilities with out-of-state gas.

Fox said further that vigilant participation in FPC gas rate cases is more imperative than ever since there are 2 billion cubic feet of gas coming into California every day. He pointed out that El Paso now collects \$180 million per year for sales of gas to three California utilities. There have been 87 filings by producers before the FPC in recent weeks, Fox stated, which will raise the cost of gas to El Paso by \$2.3 million per year. Of this amount, El Paso will probably seek to pass on to California customers \$1.8 million.

### Missouri

#### St. Louis Gas Boost

**T**HROUGH the efforts of the Mississippi River Fuel Corporation, 30 per cent more gas will become available to Laclede Gas Company and the Illinois Power Company for the St. Louis area.

The increase will amount to 115 million

cubic feet of natural gas a day and will permit the heating of 50,000 additional homes on winter days, according to William G. Marbury, board chairman of Mississippi River Fuel. He said a new company, Mississippi River Transmission Corporation, has been formed, with head-

## THE MARCH OF EVENTS

quarters in St. Louis, to build a new pipeline from near Oran, Missouri, in Scott county, about 115 miles from St. Louis. Cost of the new pipeline will amount to about \$8 million and should be completed in about twenty-four months.

If agreement can be reached with Laclede Gas and Illinois Power on rates, etc., and if the Federal Power Commission approves the arrangement, the gas boost for St. Louis should be ready in time for the 1960-61 season.

### New Jersey

#### Delay Asked in Gas Hike

**T**HE public utilities commission has been asked for a three-month postponement of the effective date for proposed new gas rates sought by the Public Service Electric & Gas Company. The request was made by Richard J. Hughes, Joseph P. Dunn, and Arthur J. Sills, the state rate counsel, who said they wanted more time to study data relating to the

utility company's electric department.

Public Service had filed for a \$15 million annual increase in gas rates on April 18th, to become effective May 18th. The commission, however, had suspended the new rates until November 18th.

Both sides have been asked to file briefs on the motion for delay. A hearing will be held to hear the arguments of the state rate counsel and the company.

### New York

#### Gas Rates Reduced

**R**ATES for nonresidential use of gas in part of Brooklyn and Queens have been reduced by the Brooklyn Union Gas Company by an estimated \$1,039,000. The reduction applies in the territory served by the company prior to its consolidation with Kings County Lighting Company and New York & Richmond Gas Company on Staten Island. Commercial and industrial establishments will be affected. There are about 51,500 such customers in the company's former territory and in its fil-

ing the utility indicated that it is currently making a study for the establishment of a system-wide uniform nonresidential rate.

Depending on use levels, individual bills for consumption of more than 5,000 cubic feet per month will be reduced up to 15.5 per cent. Monthly savings of \$3.85 will accrue to those using 20,000 cubic feet; \$13.10 for consumption of 50,000 cubic feet; \$25.60 for use of 100,000 cubic feet; and will increase to a maximum of \$200.60 for customers using 1.6 million cubic feet or more monthly.

### Oklahoma

#### Would Muzzle REA Boss

**A** REGIONAL meeting of REA electric co-ops has requested REA Administrator David Hamil to refrain in the future from making comments in speeches to co-op groups on proposals to require co-ops to obtain funds for future expansion in the private money market and to

raise the present fixed 2 per cent interest rate on REA loans to correspond to the interest rate paid by the U. S. Treasury. Although Hamil has never actively supported either proposal, the administration is known to favor both. Up to now, most of Hamil's remarks on the subject have been confined to stating what the proposals are and to warn co-ops that there

## PUBLIC UTILITIES FORTNIGHTLY

is growing sentiment in favor of making them less dependent on the federal Treasury.

Officials of the National Rural Electric Co-operative Association apparently object even to these references to proposals they regard as threatening the existence of co-ops. According to the resolution passed at a meeting of NRECA's Region VIII in Oklahoma City, the wide publicity given to Hamil's remarks on these proposals tends to "drive a wedge of dissension" between REA and the co-ops, and renders "aid and comfort to the opponents of the co-operatives."

The resolution states in part that "David Hamil, as Administrator of the Rural Electrification Administration, as an invited guest of this assemblage of Region VIII of the NRECA, now in session, be, and is hereby, requested to discontinue in any address, speech, or remarks, that he may hereafter make as a guest of any of the forthcoming regional or annual meetings of the NRECA, any advocacy directly, or indirectly, of a suggested change in the now existing policy of the Rural Electric Co-operatives concerning the source of its funds to be obtained and the interest to paid thereon."

## Oregon

### Public Ownership Rejected

**E**LECTION returns showed that three public power proposals were rejected in Oregon on November 4th.

Portland voters defeated, nearly 2 to 1, a proposed \$5 million hydroelectric bond issue to install power generators at the city's Bull Run water supply source.

Voters of the city of Springfield defeated a \$3.5 million bond issue to finance proposed acquisition of Pacific Power & Light Company's distribution properties by vote of 2,062 for and 2,322 against. The city system has been competing with the company for the past eight years and the proposal was submitted by the city as a method of resolving problems of duplication. The company had stated that if the city proposal were defeated, the com-

pany would like to see voters given opportunity to consider sale of the municipal system to the company.

A statewide referendum submitted by the legislature, proposing amendment of a 1932 constitutional provision authorizing the state to engage in power development and sale appeared decisively defeated by a 4-to-3 margin. Such an amendment would have allowed the state to develop steam and nuclear power in addition to hydroelectric and would have increased general obligation bonding authority of a state power commission (if later established) from 6 per cent to 10 per cent of total assessed value of state.

The only restrictive feature of the proposal would have limited the state to wholesaling of power except for industrial loads over 10,000 kilowatts.

## Pennsylvania

### Philly Subsidizes Transit

**I**N an effort to woo auto riders back to transit habits, the city of Philadelphia has embarked on a unique experiment to check the big slump in mass transportation.

NOVEMBER 20, 1958

It will pay \$160,000 to two railroads to see whether cheaper rides and better service will attract a greater number of passengers.

This is the first time a municipality has agreed to help pay for commuter service.





## Progress of Regulation

### *Trends and Topics*

#### Rate Concessions under Franchise

THE furnishing of free service, or service at reduced rates, even though required by a franchise, violates the theory of rate regulation. A state, in the exercise of its policy power, may change rates fixed by franchise, even though the franchise may constitute a binding contract between the parties. These principles have been stated in many decisions by courts and commissions, but occasionally controversies over the application of these underlying principles have arisen.

#### *Disapproval of Discrimination*

The North Carolina commission, in a rate case, recently ruled that a telephone company should discontinue its custom of furnishing free franchise service. It was said to be apparent that this amounted to nothing more nor less than the rendering of certain service without charge. The result was that all other ratepayers paid for this service. Many telephone companies, said the commission, had discontinued this policy, and the commission believed that the statutes of North Carolina prohibited the practice.

Subsequently the commission reopened the proceeding for further consideration of the question of free service to cities and towns. This followed a petition for rehearing based upon the contention that a city had not been given an opportunity to explain the franchise agreement and its support. Neither this city nor other towns and cities had offered any testimony on the subject. They had not presented the terms of any contract or agreement with the company. With due regard to the importance of this matter and that all the facts might be available should it go forward on appeal to the courts, the commission found that this phase of the proceeding should be reopened. *Re Carolina Teleph. & Teleg. Co.* Docket No. P-7, Sub 88, September 4, 1958; rehearing granted October 15, 1958.

The Connecticut commission, in the Southern New England Telephone Company case, said that rate discounts should not be given to municipalities

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if they have the effect of compelling the company's other patrons to make involuntary contributions to the municipalities through rates they pay for service. The evidence presented at the hearing, however, did not offer sufficient information to permit detailed evaluation of the company's reasons and the basis for the offering of rate discounts. Municipalities had not been given notice that the matter would be considered, and the commission concluded that it would be in the public interest to require the company to furnish detailed information concerning this matter (20 PUR3d 34).

The same commission, several years ago, said that tariff provisions for reduced rates to municipalities were to be strictly construed because such a practice approached the border ground of discrimination between customers (57 PUR NS 129).

The Massachusetts commission has said that a municipal government is to be considered strictly as a customer of an electric company, and the fact that the taxpayers upon whom the burden of municipal costs falls are in large measure also individual customers of the utility does not permit the utility to furnish service to the municipality except at fair and reasonable rates (96 PUR NS 77). In the words of the Rhode Island commission, a discount to municipalities on their telephone rates is tantamount to according them preferential treatment which is not accorded to other classes of subscribers and, consequently, it should be discontinued (77 PUR NS 469).

Objections to such rate concessions have been voiced in Idaho (PUR1921B 739; PUR1924C 313), Maine (41 PUR NS 225), Pennsylvania (31 PUR NS 56), and elsewhere. The furnishing of free gas to cities in consideration for the use of streets in compliance with the terms of ordinances was termed by the Kansas commission many years ago a species of patent discrimination against consumers required to pay scheduled prices (PUR1915E 763; PUR1916B 331).

### *Possible Justification for Concessions*

There may, of course, be situations in which free service or reduced rates, pursuant to franchise provisions, are not unduly discriminatory. The North Dakota commission, for example, said that so-called "free service" given by an electric company for the use of streets and alleys could not properly be called free service. It appeared that free light was furnished to light the city hall. The amount of electricity consumed was small, and the commission was of the opinion that no discrimination would result if the arrangement were continued (PUR1923A 816).

Similarly, the Oklahoma commission said that the furnishing of free gas service to a city and city buildings might be permitted to continue until found to be inequitable to other consumers or conducive to waste, where the amount was small and free gas was an inducement held out to the city for granting a franchise. The commission, however, noted that the franchise provision was not binding on the commission (PUR1917D 947).

The Illinois commission, long ago, said that free service rendered in accordance with the grant of a franchise whereby the utility obtains the right to

## PROGRESS OF REGULATION

do business within a city was not necessarily discriminatory within the meaning of the Illinois statute. Such free service might, within reasonable limits, be considered as a payment for the privilege granted to the utility (PUR1917C 215).

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### *Review of Current Cases*

#### **Accelerated Depreciation Held Not Compulsory for Gas Company and Revenues Properly Adjusted for Steel Strike**

A UTILITY is not bound to take accelerated depreciation in order to reduce the present cost of service to customers, the Pennsylvania superior court ruled, affirming a commission order. Manufacturers Light & Heat Company did not abuse its managerial discretion in reverting from accelerated to straight-line depreciation and claiming a federal income tax allowance on the latter basis, even though the reversion was made after a rate proceeding in which the company was denied the tax benefits of the accelerated method. In that case the company had not been permitted to normalize the effect of accelerated depreciation.

It was noted that there was no evidence of abandonment of the fundamental plan to claim all depreciation in the course of the life of the property as a deduction from taxable income. There were merely two revisions of the scheduling, both permitted by law. The decision to use any permissible method of determining depreciation in filing the federal income tax return and computing the tax is largely a matter for management, said the court. However, the commission has control over the amount which it will allow a utility for taxes for rate purposes the same as for any other annual expense. Only the actual taxes paid are allowed in Pennsylvania.

The court observed, without elaborating, that "the outspoken attitude of Manufacturers that it reverted to the straight-line method because it could not retain the benefits of accelerated depreciation is unbecoming to a public service company." But it thought a utility should not be required to use any particular method of depreciation in computing the federal income tax allowance when the law authorizes any of several methods which ultimately allow only the deduction of depreciation over the life of the property.

#### *Revenue Adjustment for Steel Strike*

The court ruled that the commission properly adjusted the company's revenues to reflect the effect of a steel strike during the test year. The company, on the other hand, contended that the adjustment should not have been made, because of a decline in gas sales after the test year resulting from a decline in steel production. It cannot be doubted, the court held, that the adjustment for the steel strike was proper since steel strikes are not so regular as to make their occurrence in the future other than mere speculation. Test year figures should reflect typical conditions.

The evidence as to the reduction in steel production after the test period was considered too uncertain and speculative to

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require adjustment of revenues. There was nothing to indicate whether revenues increased or decreased in general as a result of sales to other customers, or whether the decline in steel production was a permanent one. Any adjustments for occurrences after the test year are, to a very large extent, within the discretion of the commission, and adjustments need not be made for temporary economic fluctuations.

### *Current Prices in Fair Value*

Manufacturers complained that the commission had not given proper weight to prevailing price levels. The commission arrived at a fair value rate base of \$115 million for property allocated to Pennsylvania retail sales, on the basis of original cost of \$92 million, original cost trended to the average price level of 1956 \$149 million, trended to 1955-56 \$141 million, to 1954-56 \$137 million, and to 1952-56 \$131 million.

The company thought present fair value should be based substantially on depreciated trended original cost at the 2- or 3-year average price level and that little weight, if any, should be given to original cost. Fair value is the value existing at the time rates are established or at the time the value is in issue, said the court. The commission is not obliged to give equal weight to each measure of value. Its duty is to consider all measures, and in the absence of an abuse of discretion, the commission's determination will stand.

A reserve requirement study, as revised by the commission, was used to determine accrued depreciation since it appeared that actual accrued depreciation and depletion were less than the amount in Manufacturers' book reserve. The commission had found that book reserve was unreliable because of inconsistencies in the accruals through the years. The city of Pittsburgh, nevertheless, claimed that an allowance less than the book reserve would result in confiscation of customers' property.

In agreement with the commission, the court held that the excess of book reserve over the reserve requirement as shown in the revised study was not genuine and that there was, therefore, no confiscation of customers' property by reason of the acceptance of the reserve requirement figure. In determining a fair value rate base, the commission is required to ascertain the actual depreciation as it has accrued to the date that fair value is in issue, said the court. Furthermore, the nature of depreciation is such that it must of necessity be a judgment figure, though based upon reliable evidence.

### *Rates Not Discriminatory*

The court held that the rate structure as authorized by the commission was fair and reasonable despite a charge by the city of Pittsburgh of discrimination in favor of large industrial customers. The evidence amply sustained the commission's conclusions, the court declared. *City of Pittsburgh et al. v. Pennsylvania Pub. Utility Commission*, 144 A2d 648.



## CAB Lacks Jurisdiction over Depreciation Charges

THE U. S. court of appeals held that the Civil Aeronautics Board has no jurisdiction to regulate depreciation allowances for air carriers.

The board had issued a regulation setting forth the kinds of equipment for which depreciation might be taken, requiring reserves for major overhauls of

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air frames, and requiring cost of overhauls to be included in the value of the aircraft. The carriers contended that the board has no authority to regulate depreciation charges, except by adjusting or disallowing them in rate making. The court of appeals, in reversing the lower court's judgment, agreed.

Congress has expressly authorized one

regulatory agency after another to control depreciation practices, pointed out the court. It has done so in the Federal Power Act, the Natural Gas Act, and the Interstate Commerce Act, Part II. The court concluded that when Congress wished to confer such authority, it had said so explicitly. *Alaska Airlines, Inc. et al. v. Civil Aeronautics Board et al.* 257 F2d 229.



### Gas Company Capital Cost Fixed and Depreciation Determined for Reproduction Cost Valuation

THE Alabama commission authorized a rate increase for Alabama Gas Corporation affecting some 50 municipalities and unincorporated communities. A rate of return of 6 per cent was allowed on a fair value rate base fixed at \$47.5 million on the basis of original cost of \$40.6 million, prudent investment of \$41 million, and adjusted reproduction cost of \$57,350,000.

#### Capital Cost

The commission allowed the experienced cost of debt capital of 3.75 per cent, though the company, apparently giving appreciable weight to current market conditions, proposed 4 per cent. Pointing to the company's own evidence, the commission observed that the bond yield average for 40 public utilities had declined from a high of 4.49 per cent in late 1957 to 3.89 per cent in mid-1958, perhaps indicating a downward trend, so that the experienced cost of 3.75 per cent might soon be higher than current cost and, therefore, excessive. Furthermore, it was noted, any increase in debt cost over experienced cost would accrue only to the stockholders and would not be consistent with the company's actual interest deductions for income tax purposes.

A proposed preferred stock capital cost

of 7 per cent was considered fair and reasonable. Evidence showed that such cost was a legally fixed liability constituting a current and foreseeable requirement.

Equity capital cost proposed at 12 per cent was found clearly excessive. Nine per cent was allowed on the basis of average earnings-price ratios of 10 representative natural gas-distributing companies, taking into consideration financing costs and market pressure incident to the issuance of additional stock. An overall capital cost of 5.98 per cent was ascertained. The company's capitalization ratios of 56.04 per cent, 3.75 per cent preferred stock, and 40.21 per cent common equity were considered reasonable.

#### Accrued Depreciation

Alabama Gas had calculated reproduction cost about \$72 million, with accrued depreciation determined primarily on a field "spot" inspection of a major portion of the property. Present condition was determined partly by observation and partly by a study of past retirements of property.

In using age in determining the depreciation of mains, services, and meters for the reproduction cost valuation, the company relied on the application of a "probability" or "survival" curve, where-



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as accruals for book depreciation reserve were made on a straight-line age-life basis.

The commission could not accept the reproduction cost calculation since, in its view, accrued depreciation had been underestimated.

Accrued depreciation for both reproduction cost and original cost valuations should be determined on the same basis, the commission indicated. It estimated the company's depreciation reserve require-

ment, which it regarded as a proper basis for determining accrued depreciation, and reduced the reproduction cost figure to \$57,350,000. Working capital of \$1.2 million, including materials and supplies, was allowed. Cash requirements were based on one-eighth of adjusted operating expenses and one twenty-fourth of purchased gas expense, reduced by 53.3 per cent of income tax accruals. *Re Alabama Gas Corp. Docket 14535, September 23, 1958.*



### Community Antenna Television Operator Permitted to String Wires to Telephone Poles

THE New York commission upheld a complaint of an independent commercial operator of a community antenna television service in the Massena, New York, area to the effect that the New York Telephone Company discriminated against it in refusing permission to attach wires to the telephone company's poles in order to furnish community antenna television service.

In the past the telephone company had permitted others to string wires to its poles for such television service. The commission held, therefore, that the company could not discriminate but should offer to the complainant the same facilities which it had previously offered to others. In other words, said the commission, the company having voluntarily permitted the use of its poles by a substantial number of community antenna systems, in effect and adjunct to the service it rendered, could not discriminate between whom it might serve.

#### *Commission Jurisdiction*

The telephone company claimed that the commission had no jurisdiction over this portion of its business, by reason of

its nonutility character. The commission rejected this claim, stating that the furnishing of service of the type involved is a link in the expanding art in which the company is basically engaged. It said that if the telephone company provided facilities for transmitting programs from studio to broadcasting station there would be no justifiable argument that the final link from the antenna to the customers' premises was not an integral part of the overall system.

Nor would the fact that some special equipment would have to be added to the system (in this case amplifiers) make any difference. Neither would the fact that the program was transmitted from a broadcasting station to an antenna by air change the result. The commission noted that many long-distance telephone calls and most transoceanic messages pass through the air.

The commission referred to *Owl Protective Co. v. Feinberg* (18 PUR3d 512) in which the appellate division of the New York supreme court held that a telephone company, having committed itself to affording leased line services to those having need therefor, could be compelled

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to lease its line facilities to a burglar alarm system. This was true despite the fact that the alarm company was a business corporation and not a regulated utility, and the further facts that the alarm signal originated and might be recorded in equipment not owned by the telephone company. The system was not

physically interconnected with the rest of the telephone system, and there was no transmission of the spoken word involved. The commission believed that the difference in the two cases was one of degree rather than of principle. *Antenna Systems Corp. v. New York Teleph. Co. Case 19001, September 29, 1958.*



### Nontransportation Utilities Not Entitled to Reimbursement For Facilities' Relocation

THE Pennsylvania supreme court reversed a lower court judgment affirming a commission order placing upon the Delaware River Port Authority the entire cost of relocating an electric company's facilities.

Commission authority to allocate costs in highway-rail crossing situations must either arise from the express words of a statute or by strong and necessary implication therefrom. The firmly established common-law rule was that nontransportation utilities obtain no property rights in highways and can be ordered by a competent state or municipal agency to relocate facilities at their own expense. This is so because such utilities have been permitted to occupy highway rights of way free of cost.

The common-law rule, however, could be abrogated by a specific statutory mandate directing the payment of relocation costs to such utilities. A legislative intent to effect any departure from such a firmly

established policy of the law must be expressed in clear and unequivocal language. Well-settled and established principles are not to be regarded as changed unless the terms of the new legislation unmistakably and unambiguously indicate such a change.

The statute which the electric company contended had evidenced an intention to change the common-law rule was held limited to transportation utilities. Also, the court did not look with favor upon the company's contention that the prior statute contained an express prohibition against the payment of utilities for relocation costs, and legislative failure to reenact the provision in the current statute evidenced an intention that such expenditures were no longer to be borne by such utilities. Negative implication, said the court, cannot be used to override settled law. *Delaware River Port Authority v. Pennsylvania Pub. Utility Commission et al. No. 120, September 29, 1958.*



### State Reimbursement of Relocation Cost Held Constitutional

A TEXAS district court has declared constitutional a statute providing for reimbursement by the state of the cost of relocating utility facilities in connection

with construction of a national system of interstate and defense highways in Texas. The cities of Austin and Dallas, together with Southwestern Bell Telephone Com-

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pany and Southern Union Gas Company, defendants in a declaratory judgment proceeding brought by the state, were held to be under no obligation to remove or relocate utility facilities operated by them unless reimbursed for the cost of such removal or relocation. Defendants' motion for summary judgment was granted.

The court specifically found that the

statute does not violate the Texas Constitution by appropriating public moneys for private or other prohibited purposes, or by releasing individual or corporate obligations. Nor does it delegate to the United States any authority of the Texas legislature or lend the credit of the state in violation of the Constitution. *Texas v. City of Austin et al. No. 110,490, August 14, 1958.*



### Stay of FPC Proceedings Not Warranted by Questionable Denial of Intervention

A FEDERAL appeals court refused to stay proceedings of the Federal Power Commission at the instance of fuel oil interests which were denied intervention.

Blue Ridge Gas Company applied to the commission for an order directing Atlantic Seaboard Corporation, an interstate pipeline company, to establish physical connections with Blue Ridge facilities to extend distribution of gas to retail consumers in Virginia. Virginia Petroleum Jobbers Association sought to intervene on the ground that its members competed in the fuel market with both Blue Ridge and Atlantic. Denying intervention, the commission alleged that the questions which Virginia Petroleum attempted to raise concerned primarily matters pertaining to the local distribution of natural gas and that the question of local public interest had been resolved by local authorities.

Virginia Petroleum thereupon asked the court for an injunction to compel the commission to grant intervention, or, pending review, to stay hearings until its right to intervene could be determined. The court ruled that as Virginia Petroleum had an adequate remedy by way of review under § 19(b) of the Natural Gas Act, the petition for an extraordinary

writ of injunction must be dismissed.

Pointing out that the hearing had just been concluded, the commission contended that any stay issued by the court would go beyond the order denying intervention and that the court, under the Natural Gas Act review power, could not stay any further proceedings. The court rejected this contention, noting that the Supreme Court has said Congress would not deprive the appeals court of its customary power to stay orders under review, without clearly expressing such a purpose.

#### *Intervention Denial Is Appealable*

The court next considered whether Virginia Petroleum had shown sufficient grounds to warrant extraordinary relief. Four controlling factors were noted: (1) Is the petitioner likely to prevail on the merits of the appeal? (2) Will the petitioner be irreparably injured without such relief? (3) Will a stay substantially harm other parties? (4) Where lies the public interest?

On the basis of the present showing, the court was of the opinion that petitioner had a right to intervene in the commission proceedings and that denial of that right was an immediately appealable

## PROGRESS OF REGULATION

order. Should the commission approve the Blue Ridge application, it was pointed out, the association's members would be in competition with natural gas introduced into a new market through interstate commerce.

The court disagreed with an argument of the commission that § 1(c) of the Natural Gas Act (exempting gas operations of local concern) was authority for denying intervention. The provision is not concerned with intervention. The court thought the petitioner had shown a probability of success on the merits of its appeal.

However, no sufficient showing was made on the other enumerated considerations.

A bare claim that if the court were ultimately to reverse and remand the case the commission would not give the peti-

tioner an adequate hearing was found to be without merit.

The court thought the question of harm to others if a stay were granted was not really before it and then turned to the factor of public interest. Noting that Congress had entrusted the commission with the administration of the Natural Gas Act in the public interest, the court observed that it must hesitate before staying what the commission may find necessary and convenient. Furthermore, the commission had completed the hearings, so that a stay at this juncture would neither further the public interest nor help the petitioner's cause. Since review of the order would be an adequate remedy, a stay of the administrative proceedings was denied. *Virginia Petroleum Jobbers Asso. v. Federal Power Commission*, Nos. 14,583, 14,584, August 29, 1958.



## Duty to Continue Service under Reorganization Plan Held Terminated

THE U. S. district court issued a temporary injunction restraining the commonwealth of Massachusetts from instituting court proceedings to compel a railroad to continue certain passenger service. The railroad had contractually obligated itself to provide the service, under a reorganization plan which also provided that the railroad could discontinue service if losses during the first two years of operation exceeded \$850,000 for any twelve consecutive months, or \$500,000 for any 24-month period thereafter, or if certain remedial legislation had not been passed during the first two years of operation.

On the issue of jurisdiction, the court pointed out that the reorganization plan had specifically reserved jurisdiction to it. In addition, the court had the general

equitable powers of a bankruptcy court to carry out a plan of reorganization.

The railroad, when losses for a 12-month period during the first two years exceeded the stipulated amounts for the critical period, was held to have gained the right to discontinue. Instead, the railroad elected to curtail the service schedule, and did not evidence an inclination to discontinue until some years later. By so doing, the railroad did not forfeit the right to discontinue, held the court. The right to discontinue service because of excessive losses during the first two years did not have to be exercised during such period. The railroad's election to exercise its right to discontinue, after operating curtailed service for more than nine years, was not considered unreasonable as a matter of law. The fact that the state had

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not exercised a 10-year purchase option in the event that losses exceeded the critical figure did not affect the right to discontinue.

Also, pointed out the court, since the remedial legislation had not been passed prior to the end of two years after con-

summation of the plan, the railroad's contractual duty to continue passenger service terminated at the expiration of two years, without making it necessary for the railroad to show excessive losses. *Re New York, N. H. & H. R. Co.* 163 F Supp 59.



### Self-executing Statute Precludes Commission Jurisdiction

THE Florida supreme court, in reviewing a commission order extending a motor common carrier's certificate, held that the commission had erred in considering the application, since it did not have jurisdiction under a statute that was self-executing.

The statute provided that carriers holding certificates to operate over public roads which parallel turnpike projects should have the right to operate over such turnpike projects upon the payment of appropriate tolls. "Parallel," pointed out the court, requires only that the routes substantially parallel the turnpike project and does not require mathematical exactness.

The statutory language contained no reference to the distance between the certificated route and the parallel parkway authorized to be traveled. The legislature was held to have intended that a reasonable maximum distance would be required.

Otherwise, the self-executing statute might be used to alter the traffic and competitive situation drastically throughout the state, the court said.

The court made it clear that the commission, although having no jurisdiction under the statute, could authorize the requested route upon a showing of public convenience and necessity. *The Greyhound Corp. v. Boyd*, 104 So2d 583.



### Commission's Right to Make Certificate Speak Truth Upheld

THE Texas court of civil appeals reversed a lower court judgment which had set aside a commission order placing a restriction in a common motor carrier's certificate. The commission was entitled to correct a ministerial omission, said the court, in order to make the certificate speak the truth.

The commission's original findings had recited that the restriction should be placed on the certificate, so the commission's action was legal. Unrestricted service over the route in question had never

been authorized by the commission, and the fact that the certificate was subsequently sold, consolidated, and separated with the approval of the commission, and new certificates issued without the restriction, did not remove the restriction.

The commission is a continuing body created by law, said the court, and it has a continuing duty which is not affected by earlier insufficient action. Although strict rules applicable to courts do not apply to administrative agencies, the agencies are subject to general legal principles regu-



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lating judicial tribunals. Just like the court, the commission may correct its own judgments to make them speak the truth.

Delay in doing so did not affect the commission's right to place the restriction in the certificate subsequently. The com-

mission's action pertained to enforcement of a purely legal right asserted by a subdivision of the state. The order did not constitute taking of a valuable operating right without due course of law. *Texas R. Commission et al. v. Jackson (Hub Motor Lines et al.)* 315 SW2d 193.



### Financial Improvement Is Insufficient Grounds for Ordering Discontinued Trains Back in Service

THE fact that progress is being made by new management of a railroad in improving its financial structure is not sufficient reason for the commission to grant a rehearing and order the continuation of passenger trains which have been ordered discontinued in a decision based on conclusive evidence, the Nebraska supreme court ruled. The case had been decided on the merits, and the subsequent order granting a rehearing was a final order subject to judicial review. The rehearing order was reversed, leaving the prior discontinuance authorization in effect.

The evidence in the original proceeding showed heavy losses from the operation of the two passenger trains, and it was found that no public necessity existed for their continued operation. Since no additional evidence was produced in support of the motion for a rehearing, there was nothing to indicate that the public had any greater need for the trains than before.

To require operation of these trains at great loss, in the absence of public need for them, would amount to confiscation of the railroad's property without compensation, the court pointed out. *Re Chicago & N.W.R. Co. et al.* 91 NW2d 312.



### Contract Carrier's Corporate Veil Pierced

THE California commission found that a contract carrier for a lumber partnership constituted a device whereby the partnership obtained the transportation of property at less than the minimum charges established by the commission. Instead of revoking the carrier's permit, a restriction was placed in the permit prohibiting the carrier from charging less than the minimum rates when it engaged subhaulers.

An interesting facet of the case was the question of whether the relationship between the lumber company and the corporate carrier was such that the separate identity of the carrier could be disre-

garded and the two firms considered as one. The commission pointed out that two conditions are necessary in order to disregard the corporate entity, or regard the corporation as the alter ego of the stockholders. The first requirement is that there be such unity of interest or ownership that the separate personalities of the corporation and the shareholder no longer exist. The carrier contended that since each partner's proportionate interest in the partnership was different from the proportionate interest in the corporation, there was no unity of interest or ownership between the partnership and the corporation.

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The commission disagreed. The persons involved in the matter are acting as a group and not individually, said the commission. When considered as a group, these persons not only comprise the entire partnership but are also the sole shareholders of the corporation.

The second requirement is met when the recognition of the separate corporate fiction would result in the evasion, circumvention, or frustration of regulatory law. If the carrier's separate corporate entity is disregarded, said the commission, the carriers actually transporting

shipments become prime carriers of the partnership lumber company and are required by regulatory law to assess and collect minimum charges established by the commission.

It was clear to the commission that the carrier was being used for the purpose of allowing other carriers to collect less than the established minimum charges. It followed, therefore, that the corporation was being used to evade and circumvent regulatory law. *Re Southern California Lumber Transport, Decision No. 57341, Case No. 6016, September 15, 1958.*



### Original Cost and Purchase Cost Given Equal Weight in Transit Rate Base

**D.** C. TRANSIT SYSTEM, INC., has obtained authority from the District of Columbia commission to increase fares—the first increase since the company acquired its franchise in 1956. Cash fares will now be 20 cents, tokens 20 cents, and school fares 10 cents. The weekly permit is discontinued.

The company was required to continue the use of tokens during a 4-month experimental period even though they will cost the same as cash fares. The commission thought tokens would be a convenience to customers and would serve to speed up operations. The purchase of tokens in lots by federal and District agencies and by commercial organizations is a convenient method of accounting for the cost of transportation of employees, it was noted.

D. C. Transit asked the commission to apply the operating-ratio method and allow earnings of 6½ per cent on gross operating revenues. However, the commission took the view that the company's conversion program had not progressed to the point where conditions warranted

shifting to the operating-ratio method. This, then, necessitated determining a rate base.

#### *Fair Value Rate Base*

Evidence showed that the original cost of the transit properties was approximately \$18 million, while the purchase cost was about \$10 million. The commission recognized that the staff's proposal to use purchase cost gave no consideration to the effect on the purchase price of an assumed liability for track removal and repaving, nor to the fact that the sale was made by Capital Transit Company at a time (1956) when the loss of its franchise was imminent, so that the purchase price might not necessarily represent the fair value of the property.

On the other hand, the company's proposal to use original cost ignored the fact that the property was acquired at substantially less than book value. Nor did this proposal consider the income tax savings to be realized from track removal and repaving costs.

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In balancing the interests of both customers and company, the commission gave equal weight to original cost and purchase cost and fixed a fair value rate base of about \$14 million. It observed that it was not bound by any particular method in arriving at a rate base but could make its own determination as circumstances seemed to require, as long as it exercised reasonable discretion, and the end result was just and reasonable.

### *Earnings and Adjustments*

The commission calculated that earnings under the new rates would afford a rate of return of 6.17 per cent on the fair value rate base. Although the company was expressly not accused of mismanagement, it was admonished to "inaugurate

appropriate economies in its future operations." It was noted that when the earnings position of a public utility necessitates an increase in rates, such position requires proof of economical management as well as provident control of expenditures.

Since the injuries and damages accrual was accumulating a substantial reserve, the company was required to reduce the rate of accrual from 4.75 per cent of operating revenues to 4.25 per cent. Cost allocations were required to be made to charter and sight-seeing operations, notwithstanding the company's claim that such services were an integral part of mass transportation. *Re D. C. Transit System, Inc. P.U.C. No. 3602, Formal Case No. 460, Order No. 4480, August 28, 1958.*



## Service to Privileged Individuals Not Holding Out

THE Pennsylvania commission held that a college having its own water supply and serving neighboring residents was not a public utility subject to commission jurisdiction, notwithstanding that the supplier had been charging a set fee for its service. The evidence showed that the college was not making a profit on its water system, and that the revenues obtained from customers were not sufficient to offset the cost of running the water system.

The test as to whether an owner is a public utility is whether or not such person holds himself out, expressly or impliedly, as engaged in the business of supplying

his product or service to the public as a class or to any limited portion of it, as contradistinguished from holding himself out as serving or ready to serve only particular individuals.

The essential feature of a public use is that it is not confined to privileged individuals but is open to the indefinite public. In the instant case, the college was engaged simply in an undertaking of a private nature to supply the college with water, and, incidentally, a few others similarly situated. *Camp Wohelo, Inc. v. The Novitiate of St. Isaac Jogues, Complaint Docket Nos. 16683, 16712, October 6, 1958.*



## Convenience of Few Not Public Convenience And Necessity

THE Washington and Idaho commissions, in a joint decision, approved a

railroad's application to discontinue certain passenger trains. The single issue be-

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fore the commissions was that of public convenience and necessity, which was found not sufficient to warrant continued operation at a financial loss.

Three essential elements necessary for a showing of public convenience and necessity, pointed out the commissions, are the cost of service, use by public, and availability and adequacy of other transportation facilities.

The public whose convenience and necessity the law requires to be served is the public generally, the whole public, and not a small part of the public. It is not the convenience of a few persons or businesses which may invoke the doctrine; it

is the necessity of the public, as distinguished from individuals, that controls.

The protestants' evidence had suggested that existing rail service was needed during periods when climatic conditions immobilize other modes of transportation. The commission held that such evidence was speculative and calculated to continue operation as a "stand-by" service. Nor did the claim of prospective need bottomed on evidence of anticipated industrial development and increased population constitute sufficient grounds to require continued operation. *Re Union P. R. Co. Case No. R-2000-25, Cause No. T-9143, August 15, 1958.*

## Other Recent Rulings

*Property Rights of Certificate Transfer.* The Washington supreme court held that the transfer of a certificate authorizing intrastate operation as a general freight carrier involved "property rights" so as to fall within a statute authorizing the commission to approve the transfer upon a showing that property rights might be affected. *Lee & Eastes, Inc. v. Washington Pub. Service Commission, 328 P2d 700.*

*Air Carrier Freight Rates.* The U. S. court of appeals affirmed a CAB order holding that the board is not authorized to approve agreements between air freight forwarders and airlines fixing rates for air transportation which would otherwise violate the rate-making provisions of the act; however, special reduced rates for air freight forwarders are not necessarily unlawful and a regulation prohibiting the filing of such rates by airlines would be premature. *Airborne Freight Corp. v. Civil Aeronautics Board, 257 F2d 210.*

*State Agency as Party Defendant.* The Illinois appellate court held that an air transport company was not prohibited by a constitutional provision barring suits against a state from instituting injunction proceedings to restrain the Secretary of State, the Director of Public Safety, and the Superintendent of Highway Police from enforcing the provisions of motor vehicle laws and otherwise interfering with operation of the company's transportation services pending judicial review of the secretary's refusal to grant the company's application for certain licenses, since there is no encroachment upon the immunity of the sovereign by making a state agency a party defendant. *Continental Air Transport Co., Inc. v. Carpentier et al. 152 NE2d 488.*

*Certificate Restriction Removal.* The Florida supreme court held that a restriction as to domiciling of equipment could not be eliminated from the certificate of a heavy hauling motor carrier without a

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showing of public convenience and necessity. *Leonard Bros. Transfer & Storage Co., Inc. et al. v. Boyd et al.* 104 So2d 489.

**Competition Pertinent to Rate.** In reviewing a Civil Aeronautics Board order fixing an "equalized" rate for mail flown between San Francisco and Tokyo, an appeals court ruled that the board properly gave weight to the fact that, had it fixed a rate based on actual mileage, nearly all the business given to the complaining airline would have gone to another airline operating over a shorter route between Seattle and Tokyo. *Pan American World Airways, Inc. v. Civil Aeronautics Board*, 256 F2d 711.

**Competing Service Authorized.** Despite protests by existing carriers, the Colorado commission granted an applicant competitive authority to carry movie films intrastate where it appeared that existing service was not adequate. *Re Snider (News & Film Service)*, Application No. 16432, Decision No. 50810, August 20, 1958.

**Telephone Rate Increase.** The North Carolina commission authorized a telephone company earning a return of only 2.75 per cent to increase rates so as to earn a return of about 6 per cent upon the fair value of its properties. *Re Central Teleph. Co.* Docket No. P-10, Sub 85, August 22, 1958.

**Working Capital Allowance.** The Utah commission considered a 45-day working capital allowance adequate for a small telephone company. *Re Manti Teleph. Co.* Case No. 4644, August 29, 1958.

**State Certificate for Interstate Haul.** A motor carrier engaged in exempt transportation of milk over an interstate route

from New York state areas to New York city obtained a certificate from the New York commission to operate entirely over shorter intrastate routes, notwithstanding a contention by protestants that such action would encourage the establishment of exempt interstate milk-hauling business as a basis for seeking state authority. *Re Adler*, Case MT-7861, September 8, 1958.

**Excessive Salary Expense.** In authorizing a rate increase for a small telephone company, the Wisconsin commission disallowed salary and wage expenses in excess of the average per-station expense for salaries and wages experienced by several comparable companies. *Re Mondozi Teleph. Co.* 2-U-4997, August 28, 1958.

**Rate Case Evidence.** Rate making is not an adversary proceeding in which the applicant needs only to present a prima facie case in order to be entitled to relief, the New Jersey commission pointed out; the record must contain proof not only as to the amount of the various accounts but also sufficient evidence from which the reasonableness of the accounts can be determined. *Re Monmouth Consolidated Water Co.* Docket No. 10633, September 9, 1958.

**Water Rate of Return.** In approving a rate increase for a water company, the New Jersey commission allowed a rate of return of 6 per cent on a fair value rate base. *Re Middlesex Water Co.* Docket No. 10241, September 9, 1958.

**Only Actual Tax Expense Allowed.** Following a recent ruling involving Union Electric Company, the Missouri commission declared that the accounting treatment of accelerated depreciation for federal income tax purposes should be consistent with the commission's policy of allowing



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as an operating expense only the actual tax liability, and that the actual tax liability rather than normalized taxes should, accordingly, be reflected in the accounts. *Re Missouri Edison Co. Case No. 13,544, September 11, 1958; Re Missouri Power & Light Co. Case No. 13,545, September 11, 1958; Re Joplin Water Works Co. Case No. 13,618, October 3, 1958.*

**Water Company Return.** The California commission considered a return of 6.5 per cent on a water company's rate base reasonable. *Re San Gabriel Valley Water Co. Decision No. 57326, Application Nos. 39864-39866, September 10, 1958.*

**Deferred Income Tax Expense.** In authorizing an increase in steam-heating rates, the Missouri commission held that deferred income taxes resulting from the use of accelerated depreciation should not be considered as an operating expense. *Re Kansas City Power & Light Co. Case No. 13,822, September 10, 1958.*

**Municipal Water Plant Rates.** The Wisconsin commission authorized a municipal water plant to increase rates so as to yield a return of  $4\frac{3}{4}$  per cent in order to meet the fixed costs on proposed plant additions. *Re Village of McFarland, 2-U-5051, September 15, 1958.*

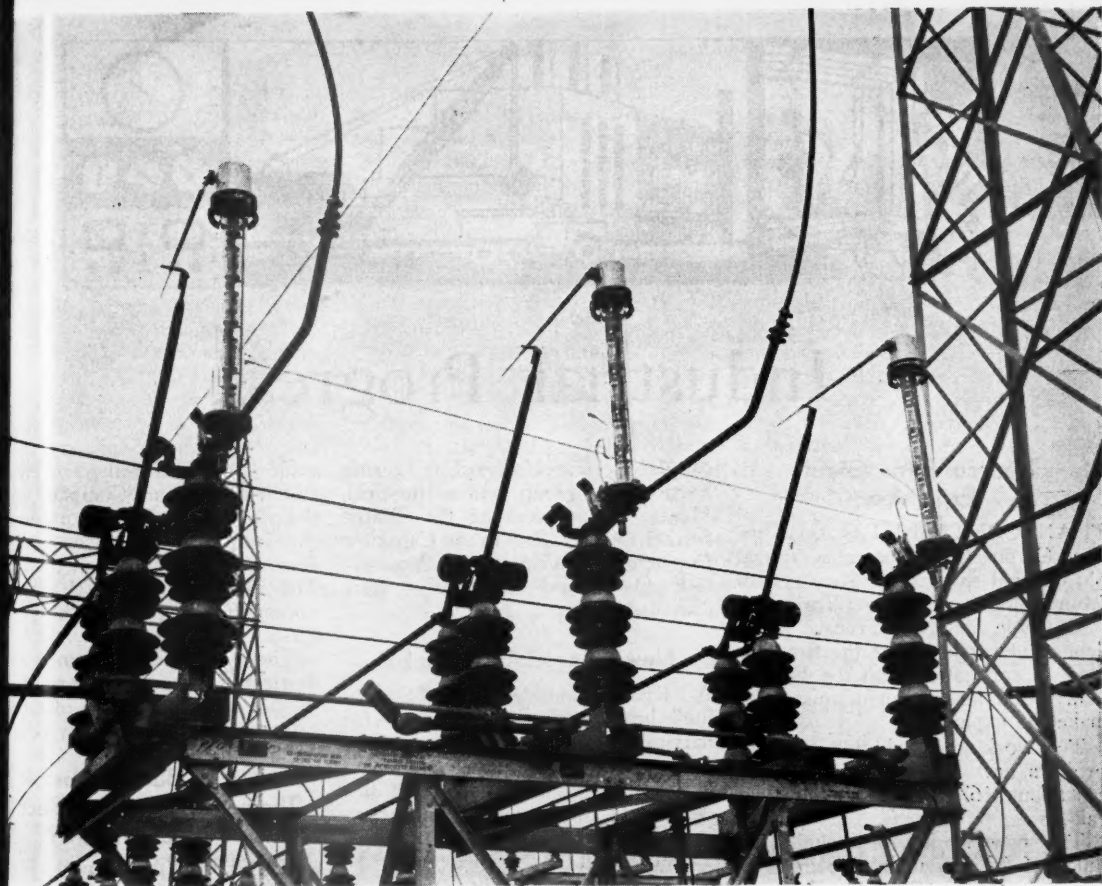
**Service Extension Denied.** The California commission denied a water company's application for permission to extend service into a contiguous area in view of the company's past improper practices and the lack of a definitive showing as to how such practices would be rectified. *Re Fontana Ranchos Water Co. Decision No. 57337, Application No. 39874, September 15, 1958.*

**Severance Damages.** The California commission held that the cost of removing personal property from condemned premises could not be included in severance damages constituting a portion of the compensation to be paid the seller of a water company. *City of North Sacramento v. Citizens Utilities Co. of California, Decision No. 57344, Application No. 38629, September 15, 1958.*

**Intrastate Telegraph Rates.** Western Union Telegraph Company obtained permission from the Georgia commission to increase rates in Georgia to a point equal to interstate rates, though the new rates would result in a loss on intrastate service. *Re Western Union Teleg. Co. File No. 19404, Docket No. 1369-U, September 18, 1958.*

**Priority of Certificate Application.** While priority of application is not determinative in a certificate case, the Florida commission indicated in granting motor carrier authority, great weight is to be given to an applicant's diligence in early filing and in producing witnesses from great distances who are evidently in need of the proposed service. *Re National Trucking Co. Docket No. 5356-CCT, Order No. 4383, September 18, 1958.*

**Station Closed Despite Profit.** Even though a railroad was earning an annual profit on an open freight station serving a small agricultural community, the Missouri commission authorized it to be closed because of meager public use, except during two summer months when it was required to remain open to serve substantial needs of grain shippers. *Re Missouri-K.-T. R. Co. Case No. 13,588, September 18, 1958.*



## INTERRUPTING HIGH LOAD AND CAPACITIVE CIRCUITS

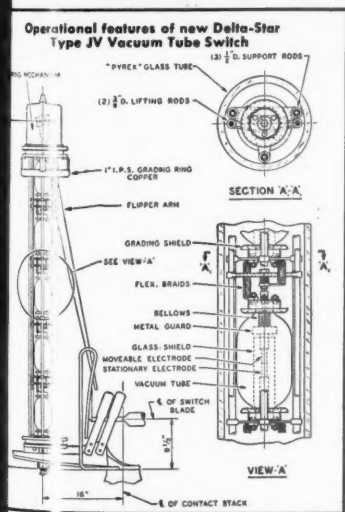
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# Industrial Progress

## Transco Plans Giant Expansion

TRANSCONTINENTAL Gas Pipe Line Corporation plans an additional \$51,000,000 expansion to its system from South Texas to New York City.

E. Clyde McGraw, Transco president, said recently that the firm has filed an application with the Federal Power Commission for permission to make the expansions.

The work is in addition to other projects now under way which will cost about \$167,000,000, Mr. McGraw said.

The new work will include 149 miles of 36-inch main line loops in various areas, and 34 miles of 20 and 24-inch gathering laterals. A compressor station will be built in Nueces county and another in St. Helena parish, Louisiana. More power will be added to the 25 existing stations.

Mr. McGraw said the work will be the first step in a long-range program to build a third line parallel to the other two in the company's system from the lower Texas Gulf Coast to the New York City-New Jersey-Philadelphia metropolitan area.

## Power Company Engineers Meet To Discuss Technical Problems

ENGINEERS from 30 electric power companies throughout the nation met recently to discuss technical problems of electric distribution systems.

The week-long meeting sponsored by the General Electric Company is the latest in a series of system planning conferences for distribution engineers. Emphasis was on "primary" circuits and equipment (operating at 12,000 volts and higher) to meet the ever increasing demand for electric power, and on the use of computers in planning system expansion.

The first two days' sessions featured talks by members of the com-

pany's Electric Utility Engineering Section. The group went to Pittsfield, Mass., headquarters of the Transformer Division and to the Capacitor Department at Glens Falls. Visits to G-E plants and laboratories were also made.

## New "Scotchlite" Booklet

A FREE booklet describing "Scotchlite" brand reflective markings for barricades, vehicles, equipment, poles and other public utilities equipment has been offered by Dept. R8-329, Minnesota Mining and Manufacturing Company, 900 Bush Street, St. Paul 6, Minn.

The booklet points out the necessity of making various pieces of equipment brightly visible to approaching motorists or emergency crews during darkness, and pictures in color some techniques of reflective markings.

## El Paso Natural Gas to Construct And Operate \$4,812,000 Pipeline Facilities

THE Federal Power Commission has granted El Paso Natural Gas Company, of El Paso, Tex., temporary authorization to construct and operate facilities, at an estimated cost of about \$4,812,000, to acquire natural gas from the East Maljamar and Kemnitz areas in Lea county, New Mexico.

El Paso proposes to acquire the 3,520 horsepower Kemnitz Field compressor station from Tennessee Gas Transmission Company, of Houston, Tex., and to increase its capacity to 4,480 horsepower; build 4,650 horsepower in two new compressor stations; 39.3 miles of various diameter field lines; 16.7 miles of fuel pipeline; and metering and appurtenant facilities.

The facilities will enable El Paso to purchase approximately 27,000,000

cubic feet of natural gas daily. Phillips Petroleum Company, of Tulsa, Okla., Phillips produces gas from its own leases or purchases from other producers in these areas. The FPC also granted Phillips temporary authority to sell the gas in El Paso.

The FPC said the temporary authorizations were without prejudice to such final disposition of the applications as the record may require.

## "Electricity Builds Jobs" Will Be Theme of National Electrical Week in 1959

"ELECTRICITY Builds Jobs" program to dramatize the vital importance of the electrical industry to the nation's economy and progress will be the central theme of National Electrical Week, February 8-14, 1959.

The theme announcement was made by N. J. MacDonald, president of The Thomas & Betts Co., Elizabeth, N. J., and general chairman of the National Electrical Week Committee, at a meeting in New York recently of representatives of all of the electrical industry's principal associations.

The meeting was held to discuss the plans and materials developed by the N.E.W. Committee for the observance.

"The Week will still be an umbrella activity" for all branches of the electrical industry, providing a springboard for the various educational, public relations, and promotional goals of our industry," Mr. MacDonald said.

"At the same time—to focus attention on the contributions of electricity and the electrical industry to our American economy—the theme of 'Electricity Builds Jobs' will be featured of N.E.W. programs throughout the nation in February 1959."



## INDUSTRIAL PROGRESS—(Continued)

connection, our industry has an impressive story to tell. For example, one out of every 20 employed people in some branch of the electrical industry and related services, it is almost impossible in an industry so vast and so widespread as the electrical industry to make even a fair and total compensation comparisons on the basis of a few arbitrarily selected categories. However, large segments of the electrical industry's employees do fall into seven categories—manufacturers, utility contractors, wholesalers, retail service and repair shops, and communications. In 1939, there were 1,321,900 people employed in these seven categories. They received compensation of \$2,277,800,000. By comparison, in 1957, there were some 4,000 people employed in these categories, receiving compensation of \$13,739,300,000.

We believe the challenging mesut of electricity as a job builder can be carried successfully to the industry's employees, its stockholders, owners, and the general public—increased appreciation of our industry generally."

Mr. MacDonald pointed out that annual dates of National Electrical Week are always selected to include the February 11 birthday of Thomas Alva Edison. "Not only does this highlight the contributions to the kind of Edison and other electrical pioneers of his era," he said, "it also means that the timing of observance stimulates a fast, early start every year for our various industry-wide programs."

Mr. MacDonald reported that already 50 national advertisers—individual companies, as well as House of Representatives and Live Better . . . Electricity—have indicated their intention of participating in National Electrical Week with special messages on work, television and radio, and in national magazine advertising.

The national committee expects more than 250 community N.E.W. committees to be formed during the coming months to carry out locally coordinated programs—in the fields of improved wiring, increased understanding of the industry's role in the life of the community, greater customer appreciation of living better electrically, and other objectives related to the industry's goals.

One of the features of many local committees and company observances will be Science Youth Day programs.

This activity, under the auspices of the Thomas Alva Edison Foundation and the International Edison Birthday Celebration Committee, is carried on annually on the February 11 birthday of Edison to encourage greater interest on the part of American youth in scientific and technical careers. Mr. MacDonald said the National Electrical Week Committee will cooperate fully with the foundation and Edison committee in stimulating science-youth participation throughout the electrical industry.

Beginning immediately, the N.E.W. Committee's 1959 Planning Guide and Kit of Materials will be distributed throughout the electrical and allied industries. Extra copies of the guide and kit may be obtained at \$1.00 each on order from the committee's headquarters, 290 Madison avenue, New York 17, N. Y.

### Engineering Brochure Announced By Sylvania-Corning Nuclear Corp.

A NEW eight-page engineering brochure has been released by Sylvania-Corning Nuclear Corp.

Printed in two colors and photographically illustrated, the brochure details the engineering services and capabilities of the company which has participated in a large number of major reactor projects both in the United States and abroad, and which has already produced more nuclear fuel elements than any other commercial facility in the free world.

The booklet outlines the development of the company from its formation two years ago by Sylvania Electric Products Inc. and the Corning Glass Works. A section on facilities and capabilities outlines the scope of the company's Bayside Laboratory, including research and development work in the fields of metallurgy, chemistry, ceramics and nuclear engineering. Special attention is given to fuel element development, consumable arc melting techniques, non-destructive testing, analytical chemistry, and metal fabrication development.

A final section in the booklet itemizes the development and engineering services of the company and lists several of its fuel element production contracts.

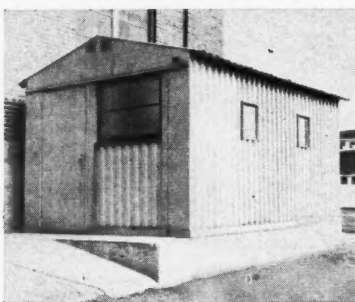
(Continued on page 22)

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## INDUSTRIAL PROGRESS (Continued)

Copies of the booklet may be obtained from Sylvania-Corning Inc., Clear Corp., Bayside, N. Y.

### I-T-E Ships Its 100-Millionth Pound Of Steel for Electrical Structures

THE 100-millionth pound of structural steel fabricated for structures that support electrical transmission, distribution, switching and control equipment, was shipped October 2 by the I-T-E Circuit Breaker Company's Greensburg Division, Greensburg, Pa.

The 100-million-pound mark was reached during fabrication and shipment of a 31,000-pound structure for Northern Indiana Public Service Company's new North Webster station switchyard at Warsaw, Indiana.

The milestone — celebrated by Northern Indiana Public Service Company, Pennsylvania Railroad Company, and Greensburg I-T-E Division — marked 46 years of unique industry service. I-T-E, a leading producer of outdoor transmission distribution devices, is the only manufacturer that produces complete structures of every size—from initial design to final fabrication—in its plant.

In a brief ceremony at I-T-E's loading platform, Mr. R. M. Schaffer, vice president of Northern Indiana Public Service Company, marked the last bundle of steel shipment to his company as it was lowered into a decorated gondola to officially acknowledge the event.

I-T-E's 100-million-pound total includes structures ranging in weight from as little as 400 pounds to mammoth structures, weighing almost a million pounds, for an entire substation. They have been shipped to electric utilities in every section of the country.

In supplying structures, I-T-E provides a completely integrated, packaged job. Starting from basic electrical diagrams and real estate plot plans only, the division designs, details and fabricates all structural parts and thereby has complete control of quality of the entire structure.

Pioneer in the development and manufacture of electric power transmission, distribution and switching equipment, I-T-E produces power switching equipment and substation power switching centers, isolation phase bus and distribution switching equipment such as circuit reclosers and cutouts.

(Continued on page 24)



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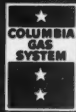
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Pennsylvania, West Virginia, Kentucky,  
Tennessee, Maryland and southern New  
York—natural gas continues to be the  
preferred fuel for home and industry.

# INDUSTRIAL PROGRESS—(Continued)

## Clark Bros. Co. Creates New Department for Nuclear Products

THE formation of a Nuclear Products Department has been announced by F. W. Lavery, executive vice president of Clark Bros. Company, Division of Dresser Industries, Inc.

"The creation of this department," said Mr. Lavery, "is one more step in the continuing Clark program to produce highly specialized equipment for the growing atomic industry. With

wide experience in building all types of compressors and gas turbines," he added, "Clark Bros. is uniquely qualified to build turbo machinery that will meet the most stringent nuclear standards." The executive noted that applications involving gas cooled reactors show the greatest immediate promise.

John K. Hubbard, former manager of Product Engineering, has been appointed manager of the new Nuclear Products Department. He will be re-

sponsible for the engineering marketing of products developed by the Research and Engineering departments for nuclear applications.

## Savannah Elec. & Power Awarded Contract for New 46,000 KW Unit to Stone & Webster

THE Savannah Electric & Power Company has awarded the contract for design and supervision of construction of a 46,000 KW unit (Nuclear Plate rating) at its Port Wentworth station, to Stone & Webster Engineering Corporation.

The new facility, listed as Unit No. 2 of the Port Wentworth station, located six miles from Savannah, was completed by Stone & Webster in 1957. The company previously had designed and built the 44,000 kilowatt Unit No. 1, at the utility's Riverside power station, also at Savannah.

Stone & Webster Engineering Corporation announced the appointment of E. J. Ford as Construction Manager and F. A. Sawyer as Project Engineer for Savannah Electric's new power unit.

## Natural Gas Pipeline Facility Costing About \$518,822,000 Authorized by FPC During Year Ending June 30th

FEDERAL Power Commission Chairman Jerome K. Kuykendall reported recently that the FPC during the 12 months ended June 30, 1958, authorized the construction of natural gas transmission facilities estimated to cost more than \$518,822,000 and including nearly 4,400 miles of pipeline and approximately 424,000 horsepower in compressor units.

The new facilities, Chairman Kuykendall said, would add more than 1 billion cubic feet of daily delivery capacity to the nation's individual transmission systems. The figures include only facilities authorized for interstate natural gas pipeline companies and do not cover certificates issued to independent producers.

Major projects—those estimated to cost \$700,000 or more each—accounted for more than \$49,000,000 of the total construction cost, Chairman reported. These major projects will increase the daily delivery capacity of the individual transmission systems involved by more than 2,220,000,000 cubic feet of gas daily and include about 3,600 miles of pipeline and more than 409,000 compressor horsepower. One hundred

(Continued on page 26)

*This announcement is under no circumstances to be construed as an offer to sell, or as a solicitation of an offer to buy any of these securities. The offering is made only by the Prospectus.*

## NEW ISSUE

October 29, 1958

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## INDUSTRIAL PROGRESS—(Continued)

and thirty-two cities of 50,000 population or more in 24 states and the District of Columbia, as well as numerous smaller communities, are expected to benefit from these larger projects.

The largest single authorization during the 12-month period was issued to El Paso Natural Gas Company, of El Paso, Tex., for a \$105,000,000 project designed to add new gas reserves to the company's system and increase its daily sales capacity by 185,000,000 cubic feet to meet requirements of existing customers in Arizona and California.

The FPC since February 7, 1942 (the date the certificate provisions of the Natural Gas Act became effective) has authorized construction of nearly 80,000 miles of pipeline, more than 5,400,000 horsepower in compressor units, and miscellaneous appurtenant facilities at an aggregate cost of approximately \$6,449,000,000. Major projects authorized during this period were designed to add more than 30 billion cubic feet of daily delivery capacity to the individual systems involved. Chairman Kuykendall pointed out, however, that the quantity of this additional gas to be delivered directly from transmission facilities to the nation's markets is actually somewhat lower because in some cases the same gas is transported through the systems of two or more pipeline companies.

Chairman Kuykendall, noting that projects approved during the 1958 fiscal year were designed to increase the daily delivery capacity of the individual transmission systems by about the same amount as those authorized during the previous fiscal period, said that the activity during the more recent period does not reflect the full increase in available supply and transmission of natural gas to the nation's markets. This, he said, was because of the increasing number of projects being authorized that involve the improvement and assurance of service to customers through the acquisition of new and additional gas reserves (including so-called "budget" type applications to connect facilities and to purchase gas from independent producers as it becomes available in a specific period—usually a calendar year), and also the expansion of storage facilities, or the rearrangement and replacement of less efficient and antiquated facilities.

He said that this was emphasized by the fact that a substantial majority of the 337 construction certificates issued during the 1958 fiscal year did

not add to main line daily delivery capacity of the various pipeline systems, but rather increased their ability to receive gas from producing areas, to inject and withdraw from storage fields near the main area, or to deliver gas through lateral lines extending from main lines.

Chairman Kuykendall noted particularly that the continuing development and operation of underground storage nearer the ultimate market is enabling the pipeline companies to utilize more fully the maximum capacity of their transmission systems during the warmer periods. "The storage operations, he said, by acting to stabilize supply and insure continuity of service, are becoming increasingly important factors, but not reflected in the estimates of additional pipeline capacity being made available to the nation's markets."

## Mosler Safe Forms New Affiliate in Grandview, Mo.

THE Mosler Safe Company, New York, and Dropository Corporation, Grandview, Mo., have joined forces to form the Mosler Dropository Corporation as an affiliate of the safe company, according to a recent announcement.

Edwin H. Mosler Jr., president of the 110-year-old safe company, also head the new firm. Harold Cramer, Kansas City, Mo., who was president of the Dropository Corporation which he founded in 1953, will be vice president of the new company.

Mr. Mosler said Dropository will continue to be manufactured in Grandview, and will be marketed in the United States and abroad by Mosler Safe Company and through present Dropository dealers. "We welcome the Cramer Dropository deal to our organization," he added.

The Dropository is a means of depositing envelopes, books, or valuables in a receiving container or safe without opening the protective unit. The Dropository may be in an area removed from the receiving container and separated by plate glass, partitions, or walls of any thickness. Many users of Dropositories are utilities, libraries, churches, and firms using route men. Utilities using the unit to receive collections on a 24-hour basis. Customers insert payments into a slot and the remittance is carried to a safe or repository. A baffle prevents removal of the contents via the slot.

Other officers of the new corporation

(Continued on page 28)



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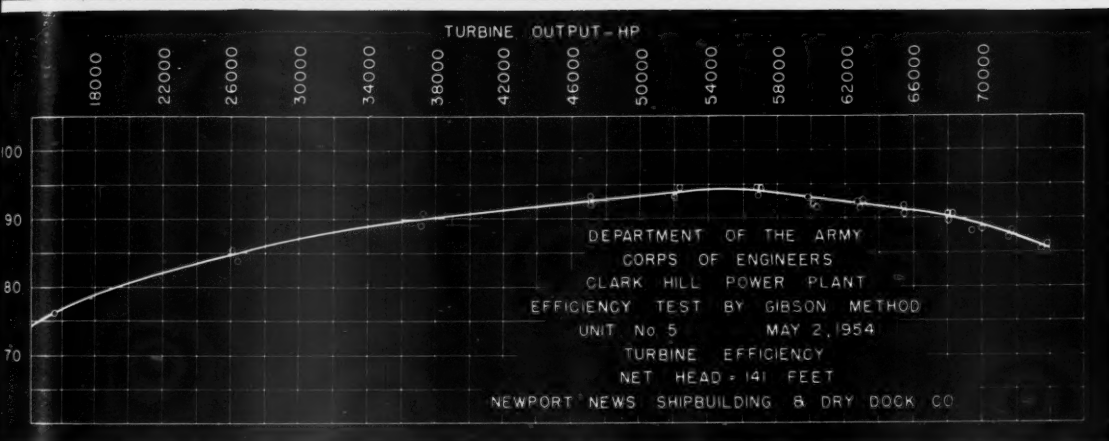
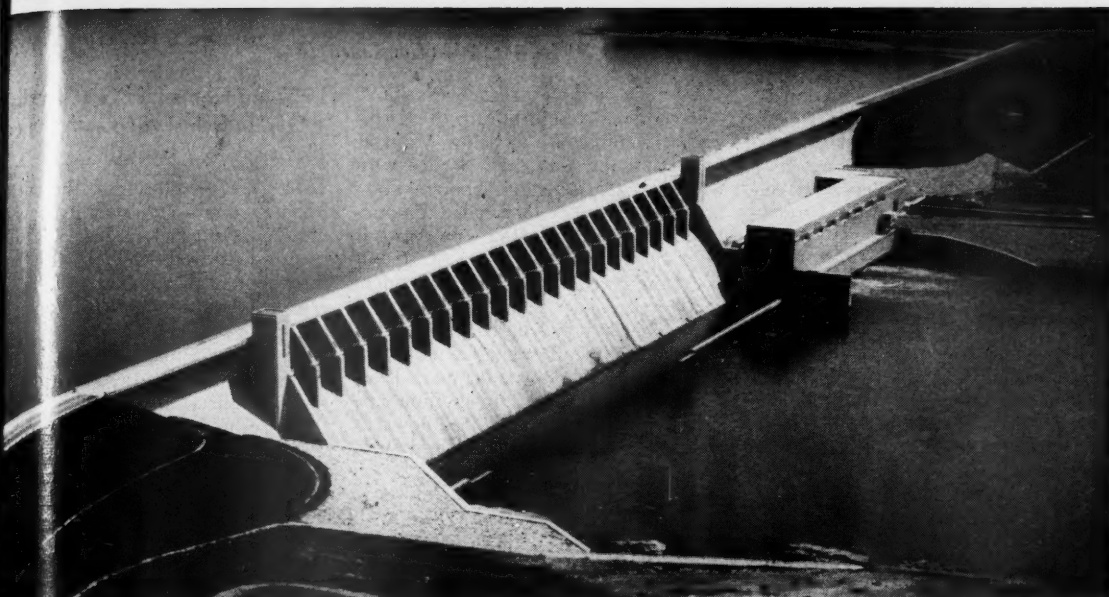
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THE GRAPH shows performance of a 55,000 horse-power turbine, one of seven such units built by Newport News for the Clark Hill Power Plant (see photo).

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## INDUSTRIAL PROGRESS—(Continued)

tion are, John Hampel, vice president, (comptroller of the Mosler Safe Company); John Mosler, secretary, (executive vice president of the safe company); and Martin Coleman, treasurer, (vice president and treasurer of Mosler).

### River Rouge Generator Goes Into Operation

ONE of the world's most powerful steam turbine-generators went into operation recently at Detroit Edison's River Rouge power plant, located on the Detroit river front at the mouth of the Rouge.

The 321,500-kilowatt unit was turned on by Daniel F. Gerber, Edison director and president of the Gerber Products Company of Fremont, Michigan, in a brief "turn-over" ceremony.

Starting up of the new turbine-generator brought the capacity of the Rouge plant to more than 840,000 kilowatts—enough electrical energy to supply the light and power needs of a million people. Including the new unit, total capability of the Detroit Edison electrical system now is nearly 3½ million kilowatts—approximately 4½ million horsepower.

The additional power furnished by the new generator goes into a "pool" fed by all six of Detroit Edison's plants—Trenton Channel in the Downriver area; Delray and Conners Creek in the Metropolitan Detroit area; and St. Clair and Marysville in the Port Huron area; as well as the River Rouge station. This power pool can be drawn upon anywhere in the Southeastern Michigan territory served by the company.

Edison's service area covers 7,600 square miles—from the tip of Michigan's Thumb south to below Monroe, and from the Canadian border west to near East Lansing. About 4,300,000 people—more than half the population of the entire state—live in this area.

At the ceremony, Edison President Walker L. Cislser pointed out that the new generator is Number Three of a three-unit installation. Construction of the Rouge plant was begun in 1953. Generating units Number One and Two, each rated at 260,000 kilowatts, went into operation in 1956 and 1957, respectively.

Mr. Cislser commended the electrical equipment manufacturing industry for research, design and fabrication advances which have brought ever greater productivity. Turbine-generators like those at the Rouge Plant produce a kilowatt-hour of electricity from less than three-quarters of a pound of coal—about half the amount of fuel required 20 years ago.

### B & W Wins Oscar for Annual Report

FOR the best annual report issued by firms in the industrial equipment field for the 1957 fiscal year, The Babcock & Wilcox Company has been awarded its third successive "Oscar of Industry" by *Financial World* magazine.

The award, a bronze statuette, was presented to M. Nielsen, president of Babcock & Wilcox, world's largest manufacturer of steam generating and related equipment, by Richard J. Anderson, editor and publisher of *Financial World*. The presentation took place during the Annual Awards banquet at New York's Hotel Astor.

Approximately 5,000 annual reports originally were entered in the 1958 competition. These were subjected to a fine process of elimination to determine the best reports in various industrial categories.

Printed in three colors, B&W's award-winning report was a 32-page magazine-type publication. Among its features were summaries of accomplishments by each of the company's divisions and subsidiaries, and details of financial operations over the past ten years. Trends in B&W's sales, income and other important facets of its activities were shown graphically by charts in two colors. The report was illustrated also by many photographs of employees at work, company facilities and research.

### 1957 Edition of FPC's "Statistics of Natural Gas Companies" Issued

THE 1957 edition of the Federal Power Commission's annual publication "Statistics of Natural Gas Companies" is now for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

The new report provides information on 93 companies, including detailed financial and operating data: the form of balance sheet statements; income and earned surplus statements; operating revenues, custom and sales; capital stock and long-term debt; operating expenses; and utility plant accounts and physical property data.

Information contained in the publication was taken from annual reports filed with the Commission by natural gas companies subject to Federal jurisdiction. Composite financial and operating statements summarizing the data for reporting natural gas companies are shown for the years 1947 through 1957.

The publication, which is paperback, will be sold exclusively by the Superintendent of Documents and not for sale by the FPC. The price is \$1.00 per copy.

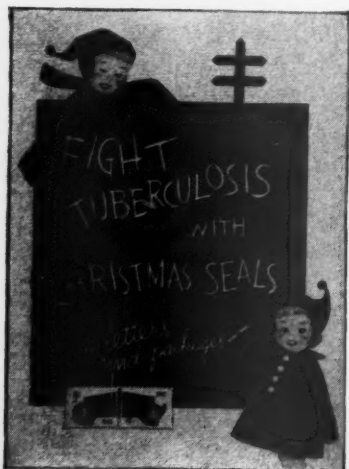
### New Beckman Literature

BEST techniques for increasing quantitative accuracy in gas chromatography are covered in detail in new data sheet just published by Beckman Applications laboratories.

Advantages of the peak or integrated area measurement and peak height measurement methods are given and several typical analyses are worked out in step-by-step fashion to show how each method is used.

The peak area technique is demonstrated with chromatograms run on a Beckman GC-2 Chromatograph and using a new type integrator. This integrator computes peak area with 0.1% accuracy and has been especially designed to operate with recorders used with Beckman Gas Chromatographs.

Free copies of Data Sheet GC-8-MI and technical information on the integrator are available from Beckman/Scientific and Process Instruments Division, Fullerton, California.



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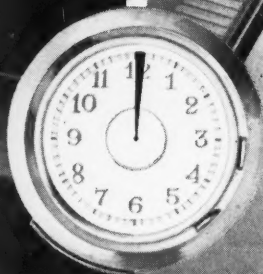
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